

MAR 6 - 1941

The Newspaper of the Industry  
Issued Every Wednesday at Detroit, Michigan

MARCH 5, 1941

Single Copy—20 Cents. \$4.00 Per Year

In Two Parts: Part One

Vol. 32, No. 10, Serial No. 624. Established 1926

Written to be Read on Arrival

Member Audit Bureau of Circulations  
Member Associated Business Papers

# AIR CONDITIONING & REFRIGERATION NEWS

Entered as second-class matter Aug. 1, 1927. Trade Mark Registered U. S. Patent Office. Copyright, 1941, by Business News Publishing Co.

## JAN. REFRIGERATOR SALES 383,000 UNITS

### Treasury Gives Defense Housing Appliance Data

WASHINGTON, D. C.—The Procurement Division of the Treasury Department recently announced contract awards amounting to \$1,421,577.50 for electrical appliances to equip defense housing units, 36,936 of which are now under construction of a total of 68,632 scheduled to be ready by the end of the summer.

The purchases include \$1,311,255 for electric refrigerators, from the Nash-Kelvinator Corp., for 25,000 6-ft. boxes; \$85,837.50 for ranges from Electromaster, Inc., Detroit; two awards, one for \$18,260 and one for \$6,225, for storage water heaters from Edison General Electric Appliance Co., Chicago.

These contracts represent less than half of the total purchases under consideration. All appliance con-

(Concluded on Page 2, Column 1)

### Mrs., Unions Fight Utility Sales Ban

BOSTON — Manufacturers and labor union representatives united Feb. 19 before the legislative power and light committee in opposing a bill to ban the sale of appliances and other merchandise by gas and electric companies.

Simon P. Townsend of Westinghouse Electric & Mfg. Co. said such

(Concluded on Page 20, Column 3)

### McDonald Is Brunner Promotion Manager

UTICA, N. Y.—O. R. McDonald has been appointed sales promotion manager of Brunner Mfg. Co., with headquarters at the factory here.

Mr. McDonald has spent his entire career in sales promotion and mer-

(Concluded on Page 6, Column 4)

### Dealers Ask Big Down Payments On Appliance Sales To Soldiers

By Jim McCallum

BATTLE CREEK, Mich.—The influx of thousands of soldiers into nearby Fort Custer since the national defense program started rolling last fall has been a distinct disappointment to local appliance dealers in terms of increased appliance sales.

Despite the fact that the Custer garrison has zoomed from about 2,000 to around 14,500 men within the past six months, and the fact that many of these men have brought their families with them, major appliance sales in Battle Creek have increased only slightly.

And even what business has been obtained from the military has been accompanied by a full quota of headaches. Most troublesome of these problems has been the fact that the army men are always subject to transfer at any time. And in these days of a rapidly expanding military force the transfers are being effected quite frequently and with little advance notice.

Upshot of the whole matter is that a dealer sells a refrigerator, for instance, to an army officer, at the

### Capital's Dealers Get Together on 'Labeling' Plan

WASHINGTON, D. C.—Descriptive labeling, a response to consumer demands for more detailed information about articles offered for sale, has been inaugurated here on a local scale by the Electric Institute of Washington. "Consumer Information Tags" are attached to refrigerators, ranges, washers, and ironers.

The tags prepared by the institute serve two purposes—to provide clear information for the customer and to assist her in making satisfactory buying decisions—and to aid the

(Concluded on Page 13, Column 1)

### Dealers State Ideas On 'Time' Contracts

NEW YORK CITY—The Electric Refrigerator Association of New York, Inc. is represented in the New York Conference on Instalment Selling, which made public a report here March 1 recommending more stringent self-regulation by instalment sellers, together with specific changes in existing state laws to exert compulsion on irresponsible dealers who ignore ethical standards in instalment merchandising.

(Concluded on Page 17, Column 2)

### 'Annex' For Trade-Ins Helps In Selling Old & New Models

ST. LOUIS—The electrical appliance dealer who expects to do a profitable job of merchandising both new and used refrigerators, ranges, and other appliances must maintain entirely separate selling locations for both types of equipment, believes E. L. Markland, president of Mack Electric Co., Frigidaire dealership at 4581 Gravois Ave. here.

Last year, Mack Electric did one of St. Louis' biggest volume jobs on reconditioned major appliances—approximately 100 units—at a better-

(Concluded on Page 13, Column 3)

### Specifications, Features Of 1941 Refrigerators

Specifications of leading makes of 1941 model household electric refrigerators are published as a supplement to this issue of Air Conditioning & Refrigeration News.

On pages 4 and 6 are a compilation of convenience features of the various 1941 electric refrigerator models. This information was collected by the staff of Air Conditioning & Refrigeration News from literature issued by manufacturers which describes features of their models.

### Crosley Ups Prices, Adds a Model

CINCINNATI—Crosley Corp. has raised the prices on most of the models in its household refrigerator line, and has introduced a new model.

Zone 1 prices now start at \$109.95 for the model A-641, which formerly listed at \$99.95. The new model SS-641 is priced at \$119.95, and provides a step up between the lowest priced unit and model S-641, priced at \$132.95.

Prices for the complete line are now:

A-641	\$109.95
SS-641	119.95
S-641	132.95
SE-641	147.95
DM-641	177.45
SE-841	177.45
DM-841	212.45

### Dealers Take Part In Carrier Preview Of 1941 Program

By Henry Knowlton

SYRACUSE, N. Y.—Drama—action—pretty girls, served up with the speed and precision of a professional revue, marked the 1941 presentation of Carrier's manufacturing and marketing plans here last week. Using the popular technique of the show "Hellzapoppin," the two-day meeting not only attracted dealers from all parts of the country, but many of them participated in the fast-moving program.

Every time a long "speech" got well under way a dealer from some where would pop up in the audience with loud objections—take the stage, and state his case. Factory men and dealers alike participated in putting over the well planned program which had been polished by the drama department of Syracuse University. What the dealers had to say was not only important—but effective in putting over Carrier plans for this year.

While the big "product" story of the convention was the new Carrier line of portable room coolers, theme of the convention was built around the "Carriatron"—a mythical product which never has been and perhaps never will be built by Carrier. Purpose of this imaginary addition to the Carrier line was to show dealers

(Concluded on Page 15, Column 1)

### Total Is Second Highest For Any Month Recorded

DETROIT—Reflecting a combination of increased consumer buying and advance dealer purchasing against possible future material shortages and price rises, world shipments of household electric refrigerators by manufacturers to distributors and dealers mounted to the astonishing total of approximately 383,000 units in January, according to estimates by AIR CONDITIONING & REFRIGERATION NEWS.

Not only setting a new all-time record for January—the previous high total was 239,000 units, established in 1940—the month's shipments also reached a mark surpassed in only one month of last year: May, with 399,000 units. The former January record for shipments was snowed under by more than 140,000 units.

World shipments of household refrigerators by 12 member companies of National Electrical Manufacturers Association totaled 363,558 units during January, to pass by more than 140,000 the previous record for the

(Concluded on Page 2, Column 2)

### New Hotpoint 'Six' To Sell at \$130

CHICAGO—A new 6-cu. ft. refrigerator, known as the "Norman," has been added to the Hotpoint 1941 line. Exterior finish, styling, and hardware are similar to those on other standard Hotpoint models. List price of the new model is about \$130. Interior features include stainless steel freezer with aluminum door, four quick-release ice trays, "six-way" cold storage compartment, and sliding vegetable crisper with glass top.

### Locker Plant Combines With Appliance Store

BARRON, Wis.—A combined electrical appliance store and frozen food locker storage plant will make its bow here soon, thanks to M. H. Verlinden, local appliance dealer.

Mr. Verlinden and Clarence Erickson have purchased a building which is being remodeled to house the combined operation. Westinghouse equipment for the locker plant will be installed by Beecher-Cumming, Inc., Minneapolis. When the remodeling is completed, Mr. Verlinden will move his appliance store into the front part of the building.

### Virginia Refrigerator Sales Double In Jan.

ALEXANDRIA, Va. — January electric refrigerator and range sales by dealers in the territory of Virginia Public Service Co. more than doubled sales for January, 1940, while water heater sales more than quadrupled the mark for the corresponding month of the previous year.

Appliance	Jan. 1941	Jan. 1940
Refrigerators	467	219
Ranges	104	49
Water Heaters	32	7



This is the main store of Mack Electric Co., where new appliances are displayed without any conflict with used models.



—and the "annex," built for display and sale of reconditioned appliances.



## Govt. Explains 'Direct' Buying of Appliances

(Concluded from Page 1, Column 1) tracts under the program are negotiated purchases, with manufacturers and wholesale distributors participating in the bids.

A number of dealers, it was revealed by the Procurement Division, have protested the method of purchase of the housing equipment with the criticism that local dealers near the sites of the housing projects should have been considered. It is pointed out by the Procurement Office, however, that the plan adopted was to expedite defense housing.

Also, it is declared, the government has saved \$1,000,000 on total purchases of \$6,000,000 for household equipment since the program began, by negotiated contracts with manufacturers. It is explained also that certain conditions as to maximum production and storage facilities for appliances in various cities while awaiting delivery had to be met under these contracts.

## January Sales Break Previous Record

(Concluded from Page 1, Column 5) month of 227,822 units, established last year. Shipments to distributors and dealers in the United States alone totaled 349,901 units during the month.

Six-foot models continued their domination of the sales picture during January, with world shipments of units in this size class amounting to 283,671 in the month, of which 276,930 units went to outlets in the United States. Porcelain exterior units made up 15,046 of the world total.

Next high in sales for the month were 8-foot models, world shipments of which totaled 29,783 units. Distributors and dealers in the U. S. alone accounted for 29,199 of this figure, and all-porcelain units in this size classification totaled 1,662 units.

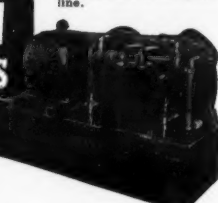
Emphasis being placed by several manufacturers on 7-foot units this year is reflected in January shipments, which reached 26,031 units.

## SERVEL

COMMERCIAL REFRIGERATING MACHINES

Whether your requirements are large or small, standard or special, Servel engineers can help you solve your most vexing problems of commercial refrigeration or air conditioning. Write today to Servel, Inc., Electric Refrigeration and Air Conditioning Division, Evansville, Ind.

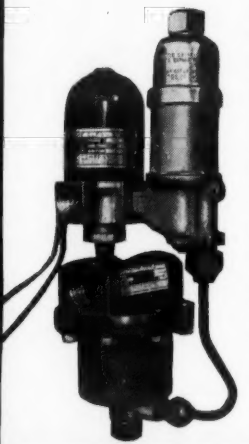
Servel's 4-cylinder 20 HP machine unit . . . one of 50 models in the complete line.



**SQUARE D**  
IN  
REFRIGERATION

DO IT ALL WITH SQUARED SWITCH • PROTECT • REGULATE

## CLASS 9160 CAPACITY BOOSTER VALVE



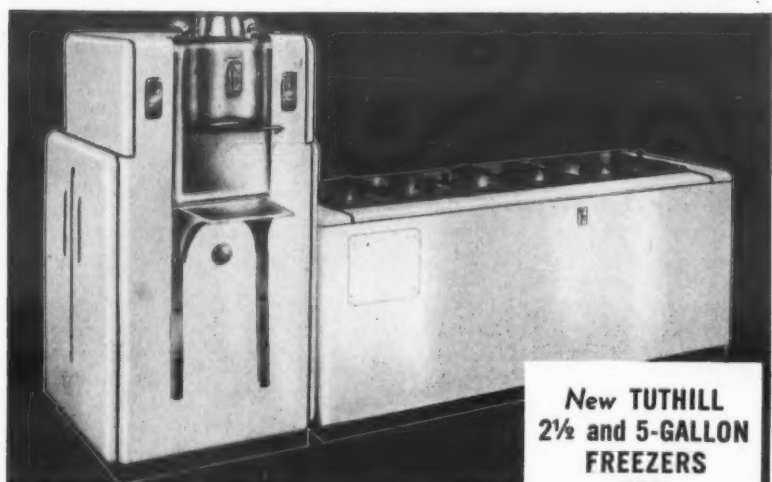
Functions in the exact manner of its pilot—boosting the capacity of that pilot! Shown at left with Square D solenoid valve and thermostatic expansion valve in pilot circuit for air-conditioning.

Jobber Inquiries Invited

**SQUARE D COMPANY**  
REGULATOR DIVISION  
DETROIT • MICHIGAN

Write for Bulletin

## DISTRIBUTORS GO TO TOWN WITH TUTHILL'S NEW REVENUE-PRODUCING EQUIPMENT



New TUTHILL 2½ and 5-GALLON FREEZERS AND Auxiliary Cabinets

Here's how to make more money showing retailers how to make money with America's outstanding freezer for ice creams, frosted malteds, sherbets, ices and frosted fruit drinks. Tuthill's complete line of 1, 2½ and 5-gallon freezers and auxiliary cabinets are big sellers because they are REVENUE-PRODUCING units that pay for themselves while making profits.

**DISTRIBUTORS:** Write for complete franchise facts and merchandising program for 1941.

REFRIGERATION PRODUCTS DIVISION  
**TUTHILL PUMP COMPANY**  
935 EAST 95TH STREET • CHICAGO, ILLINOIS

## Sam's Selling Slants



V. E. ("Sam") Vining, merchandising manager for Proctor Electric Co., is the industry's most colorful salesman. This is the twenty-fourth of a series of Sam's famous "Selling Slants" messages to salesmen. An earlier series was published in the News in 1937.

### DIRT SELLING

"Old Man Steve" Boreman was the laziest man in Blackcreek Township.

His farm was down the pike a couple of miles from ours. His laziness was no secret. Whenever you saw two farmers leaning up against a railfence chewing wheat-straws they were probably discussing "Steve."

"Steve" was so darned lazy he had even spent good money for a "ridin'-plow."

Felt himself too good to walk behind a plow like other hard-workin', God-fearin' farmers—HE had to RIDE.

And more—

He had a patent corn-planter—and a patent "drill" for wheat—and a "cultivator" and a gadget that cut up fodder and put it in one of these new-fangled silos.

He hardly did any work himself at all.

His wife even—had a machine to do her washin' and another one that separated the cream from the milk—so they said. The whole family was lazy.

And—

He had notions about such things as "crop rotation" and fancy "boughten" fertilizer. He even subscribed to an agricultural paper and believed some of the things he read in it—written, of course, by city slickers to fool us farmers. It was beyond conceivin'.

But—

The thing that disturbed us most about Steve was his INFERNAL LUCK.

Everybody knew what would happen to him eventually—but it never did. Year after year—come hell or high water—Steve raised the most corn to the acre—the most wheat to the acre—he sold more butter per cow—his hogs weighed more and his horses brought better prices.

Such luck was almost discouraging.

Of course my memories of Steve are those of a kid, but as I've grown older I've wondered—and,

I'll bet if Steve had been in your business and mine, his same methods would have sold ANYTHING—

From peas to penthouses.

## Speaking of Speaking

### Salesmen Learn 'How To Say It' Listening To Recordings of Their Own Voices

PORTLAND, Ore.—Teaching salesmen "how to say it" before telling them "what to say," through use of phonograph recordings which play back to the salesmen their own voices, is the plan developed by Richard Rawlinson, operator of a dry cleaning establishment here, which appliance dealers might find useful in improving the technique of their salesmen.

Mr. Rawlinson believes that the impression a salesman makes as he begins to talk to a prospect will be determined largely by the sound of his voice, and that what he says will carry little weight if his voice is unpleasant.

The voice-training program is carried on through a series of one-hour meetings conducted by Mr. Rawlinson. At the initial meeting, salesmen are paired to make a recording of an ordinary conversation—not a sales talk.

At the next meeting, these records are played-back to the men—who are usually somewhat chagrined when they find that their voices aren't nearly as pleasant as they had believed. With a receptive mood set up in this fashion, Mr. Rawlinson then outlines the entire program designed to improve their speech.

Next session is devoted to study of parts of the body used in speaking. The men then learn the physical requirements for a good voice—

breathing control; flexible and energetic use of the modifiers, tongue, lips, and jaw; relaxation of neck and throat to prevent harshness and lack of tone flexibility.

Actual practice then begins. The men master the old-time tongue-twisters such as "Peter Piper picked a peck of pickled peppers," or "She sold sea shells by the sea shore," and practice breathing exercises to acquire greater breath control. When the recordings show that these physical requirements have been mastered, the salesmen work for variety of utterance to avoid the deadly monotone voice.

They learn that through the inflections of their voice a great part of their meaning is conveyed. They study the principal types of vocal

variety—the rate, force, pitch, and quality.

Rate of speech, that is, the number of syllables uttered per minute, is especially important, Mr. Rawlinson believes. Weighty or complex matters, points which are to be especially emphasized, should be presented slowly and carefully so that the listener may have time to assimilate them. Short pauses before and after an important point focus the attention on those words.

If a salesman, however, is describing how a woman saved time by preparing oven dinners in her electric range, the narrative will be more interesting if told at a rapid rate.

First duty of a speaker is to be heard and understood, Mr. Rawlinson says. Though a salesman's voice may be pleasant, if his words are so indistinct that his listeners must strain to hear him, they will very soon tire of the effort. Precision and vigor are the factors which avoid indistinctness, and the salesmen practice these for hours.

Another important consideration is pronunciation. Words are sounds representing some thought or meaning, but if the prospect doesn't recognize the salesman's pronunciation, the word means nothing to the prospect. Even if the prospect does recognize the word, the mispronunciation diverts attention from the sales talk.

Because standards of pronunciation vary with locality, Mr. Rawlinson is teaching his salesmen the pronunciations which are acceptable in Oregon. Similarly, an application dealer in Portland, Me., for example, would teach those pronunciations acceptable in Maine.

This study of vocal mechanics is a long and slow process, but when it is completed, Mr. Rawlinson will begin to train his men "what to say," through once-a-week sessions with phonograph recordings.

## Anaconda Copper Refrigeration Tubes

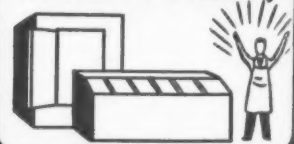
Easily bent!



THE AMERICAN BRASS CO.  
FRENCH SMALL TUBE BRANCH  
General Offices: Waterbury, Conn.



...PROBLEMS A PLENTY?



WE TACKLE ANY



BUSH COOLERS



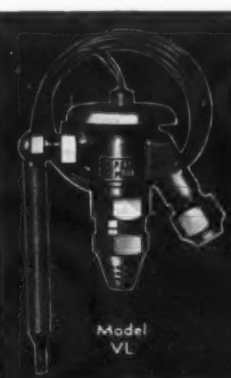
HARTFORD, CONN.

## THE ORIGINAL Velvet Action VALVES

A precision type for every need . . . Thermal Expansion, Constant Pressure, Automatic, Retarder, Defroster and Check Valves.

Peerless OF AMERICA INC.

Midwest Factory, General Offices—515 West 35th Street, Chicago  
Branch Offices: New York, Los Angeles, Dallas, Export Div., Detroit





# IN 1941 FRIGIDAIRE DEALERS ARE CASHING IN ON AN EVEN GREATER

## *Leadership in Action*

### ✓ All-time high in Sales!

1941 sales to date are biggest in history—ahead of the 1940 record-breaking pace that reached over 625,000 units.

### ✓ Greatest production in history!

Even at this early date, the Frigidaire refrigerator factory, world's largest, is producing at a FASTER pace than the all-time record of 1 refrigerator every 17½ seconds manufactured during last year's PEAK SEASON.

### ✓ Greatest products in history!

Inside and out, the 1941 Frigidaires are the most brilliant ever built ... a fact that has been proved by unprecedented nation-wide public acceptance. New Beauty! Usefulness! Economy and Value again make Frigidaire the hottest line in the industry!

### ✓ Greatest Sales Program ever!

Again in 1941, Frigidaire leads with the most intensive advertising and practical sales plans in the industry. Only an organization with Frigidaire's experience and record of Leadership in Action could provide a program so effective in meeting each dealer's needs and increasing his sales leadership in his community.

FRIGIDAIRE DIVISION • General Motors Sales Corporation, Dayton, Ohio  
*Frigidaire Electric Appliances • Refrigerators, Ranges and Water Heaters*

MORE THAN EVER IT PAYS TO

*Sell the Favorite—*  
  
*Sell Frigidaire*  
over 6 million built and sold!



# CONVENIENCE FEATURES OF 1941 HOUSEHOLD REFRIGERATORS

**Editor's Note:** The following tabulation of convenience features of 1941 household electric refrigerators, covering all of the major lines, has been compiled from "consumer" literature—line folders and other pieces furnished by manufacturers to dealers for distribution to prospects. Listings of features have been standardized as much as possible by the use of general descriptive terms (crisper, dry storage bin, meat storage drawer, quick-release trays) rather than by the manufacturer's own particular trade-name.

Also, listings have been limited, in most cases, to those units described in consumer folders, and so may not be complete as to apartment-size models or those in the sizes above 9 cu. ft.

## Crosley

**Model S641**—Shelvador, Freezor-cold evaporator, ice tray and cube releases, moonstone cold storage tray, covered vegetable crisper, interior light, defrost indicator.

**Model SE641**—Shelvador, Freezor-cold evaporator, ice tray and cube releases, 1 narrow double-depth dessert tray, meat storage drawer, sliding glass-topped crisper, dry storage bin, thermometer, interior light, defrost indicator.

**Model SE841**—Shelvador, Freezor-cold evaporator, meat storage drawer, sliding glass-topped crisper, dry storage bin, ice tray and cube releases, double-width dessert tray, thermometer, interior light, defrost indicator.

**Model DM641**—Shelvador, Freezor-cold evaporator, ice tray and cube releases, double-width dessert tray, meat storage drawer, dry storage bin, "Moist-Kold" compartment separated by plate glass shelf, sliding crisper, removable half-shelf, recessed interior light, thermometer, defrost indicator.

**Model DM841**—Shelvador, Freezor-cold evaporator, ice tray and cube releases, double-width dessert tray, meat storage drawer, dry storage bin, "Moist-Kold" compartment separated by plate glass shelf, removable half-shelf, full-width sliding shelf, covered vegetable crisper, recessed interior light, thermometer, 4-piece oven-proof pottery set, defrost indicator.

**Model A641**—Shelvador, evaporator door, glass defrost tray, interior light, ice tray releases, dessert tray.

## Coldspot

**Model 41124**—Evaporator door, interior light, glass defrost tray, ice tray releases.

**Model 41326**—Evaporator door, interior light, glass meat storage tray, adjustable sliding shelf, 2 glass covered sliding crispers, dry storage bin, ice tray and cube releases, thermometer, 2 water bottles.

**Model 41238**—Same features as Model 41326, except has 2 sliding adjustable shelves.

**Model 41336**—Evaporator door, interior light, covered meat storage tray, 2 stackable glass covered crispers, dry storage bin, ice tray and cube releases, thermometer, 1 adjustable sliding shelf, 2 water bottles, push-button type cold control.

**Model 41338**—Same features as Model 41336, except has 2 sliding adjustable shelves.

**Model 41226**—Evaporator door, interior light, covered meat storage tray, 2 glass covered sliding crispers, 1 sliding shelf, ice tray releases.

## Dayton

**Model 441**—Evaporator door, glass defrost tray.

**Model 741S**—Evaporator door, glass defrost tray, interior light, 1 sliding adjustable shelf.

**Model 741D**—Evaporator door, 2 quick-release ice trays, 1 glass half-shelf, 1 sliding shelf, 1 adjustable meat storage tray, vegetable crisper, fruit drawer with glass top, vegetable bin, interior light.

**Model 741SD**—Evaporator door, 4 quick-release ice trays, 1 dessert tray, 1 lift-out shelf, 1 sliding adjustable shelf, meat storage tray, 2 glass covered crispers, vegetable bin, interior light.

**Model 841D**—Evaporator door, quick-release ice trays, meat storage drawer, vegetable crisper, fruit drawer, 2 adjustable sliding shelves, 1 lift-out shelf, 1/2 glass shelf, vegetable bin.

**Model 841SD**—Evaporator door, quick-release ice trays, double-width dessert tray, meat storage drawer,

twin glass-topped crispers, 2 adjustable sliding shelves, 2 glass shelves, 2 lift-out shelves, vegetable bin, interior light.

**Model 8CS41**—Evaporator door, quick-release ice trays, twin glass-topped crispers, 2 adjustable sliding shelves, 2 glass shelves, frozen storage space in evaporator, vegetable bin, meat storage tray, interior light.

**Model 1041D**—Two-door cabinet, evaporator door, quick-release ice trays, double-width dessert tray, 5 adjustable shelves, meat storage drawer, glass-topped crisper, vegetable bin, interior light.

## Frigidaire

**Model S-6**—Evaporator door, quick-release ice trays, sliding crisper with porcelain top, glass defrost tray, interior light.

**Model L-6**—Evaporator door, quick-release ice trays, sliding crisper with glass top, glass cold storage tray, double-width dessert tray, interior light.

**Model L-8**—Same features as Model L-6.

**Model M-6**—Evaporator door, quick-release ice trays, double-width dessert tray, sliding crisper with glass top, lift-out shelf section, sliding shelf, meat tender section, utility storage bin, interior light, thermometer.

**Model MP-6**—Same features as Model M-6.

**Model C-6**—Cold-Wall model, with separate storage zones for frozen foods, packaged and bottled goods, normal storage, and extra-moist storage; quick-release ice trays, double-width dessert tray, glass topped meat tender, glass-covered crisper, sliding shelves, lift-out shelf, utility storage bin, interior light, thermometer.

**Model CP-6**—Same features as Model C-6.

**Model C-9**—Same features as Model C-6.

**Model CD-6**—Cold-Wall model, with freezer compartment across full width of cabinet top section; meat tender, frozen food space in freezer compartment; twin-glass topped crispers, sliding shelves, quick-release trays, double-width tray, utility storage bin, interior light, thermometer.

**Model CPD-6**—Same features as Model CD-6.

**Models CPD-9 and CPD-13.5**—Same features as Model CD-6.

## Gale

**Model GC-424**—Evaporator door, quick-release ice trays, glass defrost tray, interior light.

**Model GR-650**—Evaporator door, quick-release ice trays, glass defrost tray, interior light.

**Model GR-652**—Evaporator door, quick-release ice trays, porcelain meat storage drawer, 1 sliding crisper, interior light.

**Model GC-654**—Evaporator door, quick-release ice trays, porcelain meat storage drawer, sliding crisper, wire fruit basket, vegetable bin, interior light, glass half-shelf.

**Model GC-656**—Evaporator door, quick-release ice trays, porcelain meat storage drawer, twin sliding crispers, sliding shelf, glass utility shelf, vegetable bin, thermometer, interior light.

**Model GS-658**—Two-section evaporator, quick-release ice trays, porcelain meat drawer, twin sliding crispers, dairy basket, glass utility shelf, vegetable bin, thermometer, interior light.

**Model GC-884**—Two-section evaporator, quick-release ice trays, porcelain meat drawer, sliding crisper, twin sliding fruit baskets, glass utility shelf, vegetable bin, interior light.

## Gibson

**Model C-631**—Evaporator door, defrost tray, 1 double-width dessert tray.

**Model CU-631**—Evaporator door, interior light, glass meat container, 1 double-width dessert tray.

**Model F-6721**—Freezer shelf evaporator, 2 glass-covered sliding crispers, dry storage bin, interior light, 1 plate glass shelf, 1 double-width dessert tray, ice cube releases, thermometer, glass defrosting jar.

**Model F-671**—Same features as Model F-6721 except 1 sliding crisper, no plate glass shelf, no dry storage bin.

**Model F-681**—Freezer shelf evaporator, ice cube releases, double-width dessert tray, 2 sliding crispers, dry storage bin, 1 2-piece plate glass shelf, 1 sliding shelf, interior light, glass defrosting jar.

**Model SF-691**—Freezer shelf, evaporator with glass door, quick-release ice trays, double-width dessert tray, 2-piece glass shelf, 2 sliding vegetable crispers, dry storage bin, 1 sliding shelf, interior light, thermometer, glass defrosting jar.

**Model SF-791**—Same features as Model SF-691, except has 2 sliding shelves.

## General Electric

**Model LB-6**—Evaporator door, quick-release ice trays, defrost indicator, glass defrost tray, interior light.

**Model JB-6**—Evaporator door, quick-release ice trays, cold storage drawer, glass-topped crisper, lift-out shelf section, interior light, defrost indicator.

**Model B-6**—Evaporator door, quick-release ice trays, cold storage drawer, twin sliding glass-topped crispers, sliding shelves, dry storage bin, interior light, defrost indicator.

**Model PB-6**—Same features as Model B-6.

**Model B-7**—Evaporator door, quick-release ice trays, "butter conditioner" section, twin glass-topped crispers, dry storage bin, air filter, thermometer, defrost indicator, sliding shelves, double-width tray, meat storage drawer, interior light.

**Model PB-7**—Same features as Model B-7.

**Model BH-7**—Evaporator door, quick-release ice trays, double-width tray, meat storage drawer, dry storage bin, defrost indicator, twin glass-topped crispers, sliding shelves, thermometer, interior light.

**Models B-8 and PB-8**—Same features as Model B-6.

**Model JB-8**—Same features as Model JB-6, with two split shelves to provide additional storage for bulky objects.

**Models PB-12 and PB-16**—Double evaporators, storage bin, twin crispers, quick-release ice trays, meat storage drawer, interior light.

**Models B-3 and LB-3**—Defrost tray, quick-release ice trays.

**Model LB-4**—Features similar to Model LB-6.

## Hotpoint

**Model EA-6**—Evaporator door, glass defrost tray, interior light.

**Model EAS-6**—Evaporator door, quick-release ice trays, vegetable crisper, meat storage drawer, interior light.

**Model EB-6**—Evaporator door, quick-release ice trays, vegetable crisper, meat storage drawer, interior light, defrost indicator, lift-out shelf section.

**Model EBP-6**—Same features as Model EB-6.

**Model EB-8**—Same features as Model EB-6, with two split shelves to provide additional storage for bulky objects.

**Model EB-7**—Evaporator door, quick-release ice trays, twin glass-topped vegetable crispers, meat storage drawer, dry storage bin, sliding shelves, thermometer, defrost indicator, interior light.

**Model EC-6**—Evaporator door, quick-release ice trays, meat storage drawer, twin glass-topped crispers, dry storage section, defrost indicator, thermometer, sliding shelves, interior light, air filter.

**Model EC-7**—Evaporator door, quick-release ice trays, double-width tray, twin glass-topped crispers,

meat storage drawer, "butter conditioner," dry storage bin, air filter, thermometer, defrost indicator, sliding shelves, interior light.

**Model EC-8**—Evaporator door, quick-release ice trays, double-width tray, twin glass-topped crispers, meat storage drawer, sliding shelves, dry storage bin, defrost indicator, thermometer, interior light, utility baskets for eggs, etc.

**Model ED-6**—Same features as Model EC-6.

**Model ED-7**—Same features as Model EC-7.

**Model ED-8**—Same features as Model EC-8.

## Jewett

**Model 88**—Moist-cold compartment in top of cabinet for vegetable storage, full-width freezer section with frozen storage space, refrigerated "Bevwell" in cabinet base, quick-release ice tray, deep dessert tray, sliding shelf, 2 removable wire baskets for packaged foods, full-width sorting tray below freezer section, water bottle.

## Kelvinator

**Model SS-6**—Evaporator door, glass defrost tray, interior light.

**Model D-6**—Evaporator door, moonstone cold chest, sliding crisper with porcelain top, interior light, quick-release ice trays.

**Model S-6**—Evaporator door, moonstone cold chest with glass cover, sliding crisper with glass cover, quick-release ice trays, 5-way adjustable shelf, sliding half-shelf, vegetable bin, interior light.

**Model PS-6**—Same features as Model S-6.

**Model S-8**—Same features as Model S-6.

**Model R-6**—Evaporator door, moonstone cold chest with glass cover, twin sliding glass-topped crispers, quick-release ice trays, double-width dessert tray, 5-way adjustable shelf, vegetable bin, interior light.

**Model M-6**—Glass enclosed "Cold mist" section with double doors, all glass shelving, quick-release ice trays, double-width dessert tray, moonstone cold chest with glass cover, vegetable bin, interior light.

**Model M-8**—Same features as Model M-6.

## Leonard

**Model LSS-6**—Evaporator door, glass defrost tray, interior light.

**Model LD-6**—Evaporator door, moonstone cold chest, sliding crisper with porcelain top, interior light, quick-release ice trays.

**Model LS-6**—Evaporator door, quick-release ice trays, moonstone cold chest with glass cover, sliding crisper with glass top, 5-way adjustable shelf, sliding half-shelf, vegetable bin, interior light.

**Model LS-8**—Same features as Model LS-6.

**Model LR-6**—Evaporator door, moonstone cold chest with glass cover, two sliding glass-topped crispers, quick-release ice trays, double-width dessert tray, 5-way adjustable shelf, vegetable bin, interior light.

**Model LH-6**—Glass enclosed "Hi-Humid" section with double doors, all glass shelving, quick-release ice trays, double-width dessert tray, moonstone cold chest with glass cover, vegetable bin, interior light.

**Model LH-8**—Same features as Model LH-6.

## Mayflower

**Model MC-425**—Evaporator door, quick-release ice trays, glass defrost tray, interior light.

**Model MR-651**—Evaporator door, quick-release ice trays, glass defrost tray, interior light.

**Model MR-653**—Evaporator door, quick-release ice trays, porcelain meat storage section, 1 sliding crisper, interior light.

**Model MC-655**—Evaporator door, quick-release ice trays, porcelain meat storage section, sliding crisper, wire fruit basket, vegetable bin, interior light.

**Model MC-657**—Evaporator door,

quick-release ice trays, porcelain meat storage section, twin sliding crispers, glass utility shelf, vegetable bin, thermometer, interior light.

**Model MS-659**—Two-section evaporator, quick-release ice trays, porcelain meat section, twin sliding crispers, dairy basket, glass utility shelf, vegetable bin, thermometer, interior light.

**Model MC-885**—Two-section evaporator, quick-release ice trays, porcelain meat section, sliding crisper, twin sliding fruit baskets, glass utility shelf, vegetable bin, interior light.

## Montgomery-Ward

**Model 651**—Evaporator door, interior light, glass defrost tray.

**Model 661**—Evaporator door, interior light, glass defrost tray, vegetable crisper, dry storage bin in base.

**Model 671**—Evaporator door, interior light, covered meat storage drawer, sliding glass-topped crisper, dry storage bin, sliding shelf, removable half shelf, dessert tray, 3 ice tray releases, 2 ice cube releases.

**Model 691**—Evaporator door, interior light, covered meat storage drawer, full width sliding glass top crisper, dry storage bin, sliding shelves, ice tray and cube releases, and thermometer.

**Model 771**—Evaporator door, interior light, covered meat storage drawer, sliding glass-topped full-width crisper, dry storage bin, sliding shelves, ice tray and cube releases, thermometer.

**Model 781**—Evaporator door, interior light, covered meat storage drawer, twin sliding glass-covered crispers, dry storage bin, sliding chrome shelves, ice tray and cube releases, thermometer, 4-piece china set.

**Model 981**—Same features as Model 781.

## Norge

**Model S-903**—Evaporator door, ice tray and cube releases, "Night Watch" automatic defroster, sealed evaporator, metal covered meat storage drawer, 2 sliding, 1 cut-out shelves, glass defrost jar, sliding full-width crisper, dry storage compartment, refrigerator dish set, interior light.

**Model S-884P**—Same features as Model S-903.

**Model M-902**—Evaporator door, ice tray and cube releases, sealed evaporator compartment, metal covered meat storage drawer, glass defrost jar, 2 sliding, 1 cut-out shelves, full width glass-topped crisper, dry storage bin, interior light, refrigerator dish set.

**Model D-901**—Evaporator door, ice tray and cube releases, interior light, glass meat drawer with metal cover, glass covered crisper, dry storage bin.

**Model DF-901**—Evaporator door, ice tray and cube releases, glass meat tray with metal cover, glass topped sliding crisper, dry storage bin, 2 full shelves, 2 half shelves, interior light, glass defrost jar.

**Model S-663**—Evaporator door, ice tray and cube releases, "Night Watch" automatic defroster, glass meat tray with metal cover, full width glass-topped crisper, 1 sliding shelf, 1 cut-out shelf, glass defrost jar, dry storage section, interior light, sealed evaporator, set of refrigerator dishes.

**Model S-664P**—Same features as Model S-663.

**Model M-662**—Evaporator door, ice tray and cube releases, glass meat tray with metal cover, cut-out shelf, sliding shelf, full width glass-topped crisper, dry storage section, defrost jar, interior light, refrigerator dish set.

**Model M-661**—Evaporator door, ice tray and cube releases, glass meat drawer with metal cover, cut-out shelf, full width glass-topped crisper, glass defrost jar, dry storage bin, interior light.

**Model M-623**—Evaporator door, ice tray and cube releases, interior light, glass meat drawer with metal top, sliding glass-topped crisper, glass defrost jar, dry storage bin.

**Model M-624P**—Same features as Model M-623.

(Concluded on Page 6, Column 1)



# "What Do People Look For When Buying An Electric Refrigerator?"



THE "SIX BEST SELLING FEATURES" are given this order of importance by a nation-wide survey among refrigerator dealers: 1. Brand Name. 2. Equipment, Interior Arrangements. 3. Price. 4. Style and Beauty. 5. Economy and Performance. 6. Construction.

## GENERAL ELECTRIC *"Tops In Public Preference"* IS TOPS ON EVERY POINT!

**1. Brand Name.** Independent surveys conducted by five national magazines show that 50% more people prefer the G-E than any other refrigerator.

**2. Equipment, Interior Arrangements.** New Perfected Conditioned Air! New 10-Star Storage Features with the amazing new Butter Conditioner!

**3. Price.** G-E prices start at \$119.95, with a model built to everybody's income. Dollar for dollar, it's the best buy in refrigeration.

**4. Style and Beauty.** In no other refrigerator cabinet will you find such a rare combination of beauty and quality!

**5. Economy and Performance.** No other sealed cold-making mechanism has the proved performance record of the famed G-E Thrift Unit for enduring economy.

**6. Construction.** In the notable list of G-E "firsts" is the all-steel cabinet, stainless steel evaporator, Thermocraft insulation, Textolite door strips, Glyptal enamel, and, of course, the sealed mechanism.

*It's G-E  
for Me!*



GENERAL  ELECTRIC



## Convenience Features of 1941 Household Refrigerators

(Concluded from Page 4, Column 5)

Model D-622—Evaporator door, ice cube release, deep defrost tray, sliding glass-topped crisper, interior light.

Model D-621—Evaporator door, ice cube release, glass defrost tray, interior light.

### O'Keefe & Merritt

Model 4540—Evaporator door, ice tray releases, defrost tray, interior light.

Model 640—Evaporator door, ice tray and cube releases, twin crispers, meat storage drawer, vegetable drawer, sliding shelves, thermometer, interior light.

Model 840—Same features as Model 640.

Model 9640—Evaporator door, ice tray releases, defrost tray, interior light, sliding shelves, vegetable drawer.

Model 9840—Same features as Model 9640.

### Philco

MAH-7—Conservador, separate frozen storage section in full-width

★★★★★★★★★★



Mills Condensing Units  
By Mills Novelty Company  
4100 Fullerton Ave., Chicago, Ill.

★★★★★★★★★★

## M. B. CO. CARTRIDGE TYPE DEHYDRATOR

● The replaceable cartridge for this dehydrator is hermetically sealed in a moisture proof metal container which insures that the dehydrating agent is absolutely dry right up to the moment you are ready to place it in the dehydrator.

Cartridges are furnished with all the popular dehydrating agents and are also stocked with filter and strainer elements.

Dehydrator refills are equipped with our cone screen feature permitting free flow of the refrigerant—restriction and pressure drop cut to a minimum.



MUELLER BRASS CO.  
PORT HURON, MICHIGAN  
ORDER FROM YOUR JOBBER

evaporator, transparent glass evaporator doors, separate dry and moist cold compartments, refrigerated aluminum cold shelf, full-width sliding crisper under cold shelf, meat storage drawer, defrost signal, ice tray and cube releases, lift-out shelf, thermometer, glass center shelf, interior light, dry storage bin.

MA-7—Conservador, frozen food section, transparent glass evaporator doors, separate dry and moist cold compartments, refrigerated aluminum cold shelf, full-width sliding crisper under cold shelf, meat storage drawer, sliding shelf with center lift-out section, defrost signal, ice tray and cube releases, thermometer, dry storage bin, interior light.

MAH-9—Same features as Model MAH-7.

MH-6—Side mounted evaporator with transparent plastic door, ice tray and cube releases, meat storage drawer, aluminum cold shelf, full-width sliding crisper beneath cold shelf, dry storage bin, glass center shelf, sliding shelf, thermometer, defrost signal, interior light, separate dry and moist cold compartments.

M-6—Centered evaporator with transparent plastic door, ice cube and tray releases, twin stackable sliding glass-topped crispers, dry storage bin, meat storage drawer with glass cover, 1 sliding adjustable shelf, thermometer, interior light.

MS-6—Centered evaporator with full-length door, quick-release ice trays, glass-covered sliding meat storage drawer, twin stackable glass-covered crispers, 1 sliding adjustable shelf, dry storage bin, thermometer, interior light.

MR-6—Full-length evaporator door, cold storage tray, 1 sliding glass-topped crisper, removable half-shelf, dry storage bin, interior light.

MR-9—Evaporator door, glass-covered sliding meat drawer, quick-release ice trays, sliding glass-topped crisper, dry storage bin, removable shelf sections to permit storage of cream cans and other bulky objects, interior light, thermometer.

Model 601—Evaporator door, quick-release ice trays, glass defrost tray, interior light.

Model 661—Freezing locker compartment, Sterilamp, quick-release ice trays, double-width tray, adjustable shelf, lift-out shelf, thermometer, interior light.

Model 801—Evaporator door, quick-release ice trays, double-width tray, 5 removable shelf sections, dry storage section, glass defrost tray, interior light.

Model 861—Freezing locker compartment, Sterilamp, quick-release ice trays, double-width tray, thermometer, 5 removable shelf sections, interior light.

Model 611—Evaporator door, glass-covered meat chest, sliding glass-covered crisper, sliding shelf, lift-out shelf, dry storage section, quick-release ice trays, interior light.

Model 671—Freezing locker, Sterilamp, quick-release ice trays, double-width tray, 2 sliding shelves, lift-out shelf, dry storage section, thermometer, sliding glass-topped crisper, interior light.

Model 871—Same features as Model 671 except has 4 shelves with removable sections.

### Westinghouse

Model M-9-41—Evaporator door, ice tray and cube releases, double-width dessert tray, defrost indicator, 3 sliding shelves, 1 glass shelf, glass-front meat drawer, sliding full-width glass topped crisper, lift-out shelf, tip-up shelf, interior light, 4-piece oven-proof pottery set.

Model M-7-41—Same features as Model M-9-41, except has 4 glass shelves, 1 sliding, 1 lift-out.

Model D-7-41—Evaporator door, ice tray and cube releases, double-width dessert tray, defrost indicator, 1 glass shelf, 2 sliding, 1 adjustable shelves, meat storage tray, 2 sliding stackable crispers, interior light.

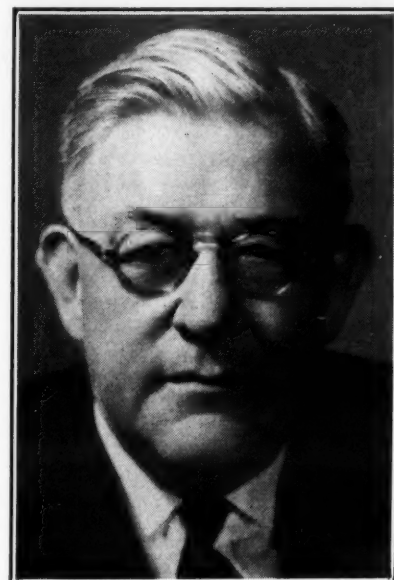
Model B-6-41—Evaporator door, ice tray and cube releases, double-width dessert tray, 1 lift-out shelf, sliding glass covered meat drawer, sliding glass-topped crisper, interior light, 4-piece pottery set.

Model S-6-41—Evaporator door, ice tray and cube releases, double-width dessert tray, deep defrost tray, sliding crisper, interior light.

Model AS-6-41—Evaporator door, ice tray and cube releases, double-width dessert tray, defrost tray, interior light.

Model AS-4-41—Evaporator door, ice tray and cube releases, interior light, glass defrost tray.

## Brunner Names McDonald New Manager of Sales Promotion



O. R. McDONALD

(Concluded from Page 1, Column 1)  
chandising of industrial equipment, his experience covering practically every phase of selling through recognized distribution channels. He has at various times been advertising, sales promotion, or sales manager of all the companies with which he was associated.

He was a member of the merchandise committee of A.E.A. in 1917, and in 1918 was named a member of the board of directors of that organization. In 1937 he was a member of the merchandise committee of N.S.P.A., representing the equipment manufacturers, and in 1938 became a director of that group.

## New York, Pennsylvania Lead In January Sales By States

States and Territories	January Sales of Household Low Sides
Alabama	3,949
Arizona	1,431
Arkansas	3,297
California	25,507
Colorado	2,164
Connecticut	7,111
Delaware	595
District of Columbia	2,860
Florida	4,239
Georgia	3,919
Idaho	1,896
Illinois	27,450
Indiana	10,592
Iowa	7,332
Kansas	3,540
Kentucky	4,593
Louisiana	4,055
Maine	1,352
Maryland	5,963
Massachusetts	13,435
Michigan	18,060
Minnesota	6,231
Mississippi	2,399
Missouri	10,139
Montana	1,372
Nebraska	2,452
Nevada	412
New Hampshire	1,228
New Jersey	13,560
New Mexico	518
New York	29,740
North Carolina	6,750
North Dakota	569
Ohio	23,876
Oklahoma	4,990
Oregon	3,309
Pennsylvania	29,278
Rhode Island	2,199
South Carolina	3,207
South Dakota	805
Tennessee	5,724
Texas	15,068
Utah	2,011
Vermont	769
Virginia	5,100
Washington	8,198
West Virginia	2,601
Wisconsin	10,233
Wyoming	523
Total United States	349,901
Canada	4,363
Other Foreign (Including U. S. Possessions)	9,294
Total for World	363,558

## 12 Nema Companies Sell 363,558 Units For January Record

The following 12 companies reported sales to the Refrigeration Division of the National Electrical Manufacturers Association (Nema) on household electric refrigerators for January, 1941:

Crosley Corp., Edison General Electric Appliance Co., Inc., Frigidaire Div. General Motors Corp., Gale Products Div. Outboard Marine & Mfg. Co., General Electric Co., Gibson Electric Refrigerator

Co., Kelvinator Div. Nash-Kelvinator Corp., Leonard Div. Nash-Kelvinator Corp., Norge Div. Borg-Warner Corp., Stewart-Warner Corp., Sunbeam Electric Mfg. Co., and Westinghouse Electric & Mfg. Co. The sales of the reporting companies include units manufactured for the following concerns: Montgomery Ward & Co., Potter Refrigeration Corp., and Sears, Roebuck & Co.

### SALES FOR JANUARY, 1941

	Domestic	Canadian	Other Foreign	Total
<b>Lacquer (Ext.) Cabinets Complete</b>				
1. Less than 4 cu. ft.	1,289	218	513	2,020
2. 4 to 4.99 cu. ft.	10,467	1,058	2,817	14,342
3. 5 to 5.99 cu. ft.	2,185	517	174	2,876
4. 6 to 6.99 cu. ft.	262,278	2,492	3,855	268,625
5. 7 to 7.99 cu. ft.	24,030†	1	294	24,325
6. 8 to 8.99 cu. ft.	27,581	71	469	28,121
7. 9 to 12.99 cu. ft.	3,027	...	53	3,080
8. 13 cu. ft. and up	41	...	3	44
9. Total Lacquer	330,898	4,357	8,178	343,433
<b>Porcelain (Ext.) Cabinets Complete</b>				
10. Less than 5 cu. ft.	...	...	...	...
11. 5 to 5.99 cu. ft.	261	5	7	273
12. 6 to 6.99 cu. ft.	14,652	1	393	15,046
13. 7 to 7.99 cu. ft.	1,697	...	9	1,706
14. 8 to 8.99 cu. ft.	1,618	...	44	1,662
15. 9 to 12.99 cu. ft.	531	...	66	597
16. 13 cu. ft. and up	244	...	10	254
17. Total Porcelain	19,003	6	529	19,538
18. Total—Lines 9 and 17	349,901	4,363	8,707	362,971
19. Separate Systems, ¼ Hp. or Less	...	...	587	587
20. Total Household Equipment	349,901	4,363	9,294	363,558
Value Index*	431.0	1,197.0	139.0	413.0

\*Based on weighted sales for 1934, 1935, and 1936. †Includes sales and credits.

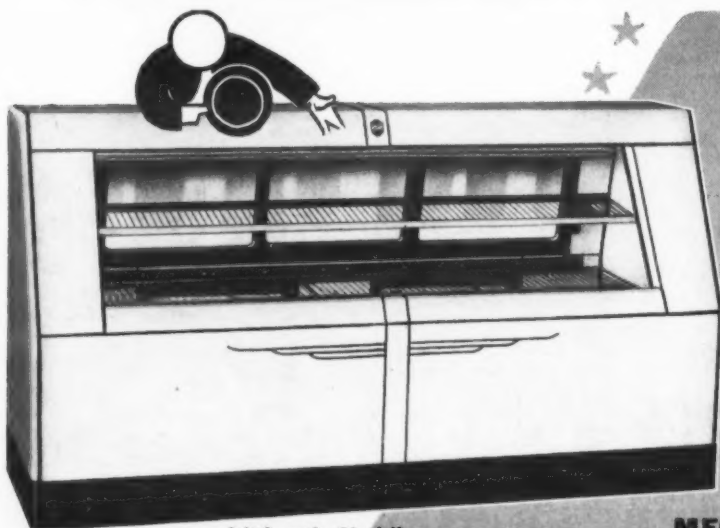
## Knoxville Dealers Sell 172 Units In January

KNOXVILLE, Tenn.—A total of 172 household electric refrigerators were sold by Knoxville appliance dealers during January at an average price of \$148 for a total dollar volume of \$25,429, according to reports from the city's electric power and water board.

Commercial refrigerator sales for the month totaled 12 units at an average price of \$615 for a total sales value of \$7,378.

A more complete tabulation of Knoxville household appliance sales for the month follows:

Appliance	Unit Sales	Average Price
Refrigerators	172	\$148
Ranges	103	141
Water Heaters	30	73
Washers	188	77
Ironers	5	74
Space Heaters	171	5
Vacuum Cleaners	56	57
Radios	825	34
Dishwashers	2	201



Midwest's 8' All-Porcelain Model MC-8

## YOU CAN CASH IN ON THESE Sensational DISPLAY CASE VALUES

Now—with Midwest's volume production again expanded—prices are arranged to make these beautiful, quality-built display cases greater values than ever! That means they're even easier to sell! Two lines—all-porcelain DeLuxe line and Leader line with Dulux exterior—fill every need.

Write at once for full details.

Midwest

MFG. COMPANY • GALESBURG, ILLINOIS  
EXPORT DIVISION, MERCHANDISE MART, CHICAGO



"If it's Midwest-built, it's better built"

## 830 Refrigerators Sold In Texas District

HOUSTON, Tex.—Sales of 830 electric refrigerators during January were reported to Houston Lighting & Power Co. by dealers in Houston, Galveston, Goose Creek, Rosenberg, Wharton, Freeport, Humble, and La Porte.

Houston dealers alone had sales of 671 refrigerators, compared with 476 in January, 1940.

Tabulation of January unit sales in the territory follows:

Appliance	Unit Sales
Ironers	34
Radios	2,589
Ranges	10
Refrigerators	830
Roasters	50
Vacuum Cleaners	358
Washing Machines	799



## MEMO TO SERVICE MEN!

● Every once in a while, some sensational improvement comes along that means an important saving of time and money in service operation, and also does a better job. We're sure that when you investigate the new and exclusive Frigidaire Modulex Expansion Valve you'll find it's one of the most outstanding of such improvements in some time.

Service Sales Department  
Frigidaire Division, General Motors Sales Corporation  
Dayton, Ohio

# Sensationally New FRIGIDAIRE Precision-Built MODULEX VALVE

Four Reasons why no other expansion valve matches it!

### 1 May be installed in any place—in any position!

Hermetically sealed from all moisture. Solves installation difficulties of ordinary expansion valves. Saves time on every installation!

### 3 Lowest Price in Frigidaire history!

All the advantages you've been looking for in refrigerant control—and all at an amazing low price, the lowest in Frigidaire history for a comparable valve! Don't fail to investigate for your installations.

● Only Frigidaire offers you these advantages in an expansion valve—the advantages you've long been looking for. In fact, if you'd written the specifications yourself, you wouldn't have designed a valve to better solve your refrigerant control problems than this sensational new Frigidaire Modulex Expansion Valve.

Now, when you install an expansion valve you don't have to work with a clumsy, expensive, hard-to-handle valve that must be placed in just the right position to provide even satisfactory refrigerant control. No. You simply install Frigidaire's new low-cost, vest pocket size Modulex Valve, wherever it's most convenient! And after it's installed...

### 2 Reduces Suction Pressure Surging!

This valve gets its name, "Modulex," from this advantage—from its modulating control of the refrigerant. Because this valve tends to keep the evaporator filled with refrigerant, it increases the efficiency of the evaporator and more even temperatures can be maintained.

### 4 Small—Vest Pocket Size!

From top to bottom it's only 3 3/8". Greatest width at any point is only 3 7/16"—and it's only 1 3/8" inches thick. Carry it in your vest pocket if you want to. Overall weight only 14 ounces!

don't worry about its performance.

This new valve is built with the same precision and quality workmanship as the world-famous Frigidaire refrigerator. It's backed by years of Frigidaire and General Motors engineering experience. It's stood the test of time and use in over 2500 installations!

Investigate this sensational new Frigidaire Precision-Built Valve, now! See how much better service you can give your customers, how much time and money you can save with its amazing improvements and low price. Contact your Frigidaire Distributor at once. Mail coupon below, today, for free descriptive booklet with full details, including prices.



**FROZEN IN A BLOCK OF ICE!**  
The ONLY vapor-charged Valve which is not affected, in operation, by surrounding temperatures. May be installed in any place, in any position!

### Contact YOUR Frigidaire Distributor!

Ohio Edison Co., Akron, Ohio  
Colonie & Montgomery Sts., Albany, N. Y.  
675 Greenwood Ave., Atlanta, Ga.  
Pratt St. & Market Pl., Baltimore, Md.  
420 N. Broadway, Billings, Mont.  
600 N. Seventh St., Birmingham, Ala.  
23-25 Blandford St., Boston, Mass.  
1100 Main St., Buffalo, N. Y.  
Merchandise Mart, Chicago, Ill.  
1729 E. 22nd St., Cleveland, Ohio  
P. O. Box 1052, Dayton, Ohio  
1920 Market St., Denver, Colo.  
824 Mulberry St., Des Moines, Iowa  
4584 Maybury Grand Ave., Detroit, Mich.  
500 San Francisco St., El Paso, Texas  
2615 W. 7th St., Fort Worth, Texas  
55 E. Washington St., Hagerstown, Md.  
3104 Main St., Houston, Texas  
927-31 N. Meridian St., Indianapolis, Ind.  
212 Michigan Ave. West, Jackson, Mich.  
2619 McGee Trafficway, Kansas City, Mo.  
1057 North LaBrea Ave., Los Angeles, Calif.  
831 E. Broadway, Louisville, Ky.  
1071 Union Ave., Memphis, Tenn.  
134 N. W. Third Ave., Miami, Fla.

647 West Virginia St., Milwaukee, Wisc.  
4 Cummins Station, Nashville, Tenn.  
19 E. Washington St., New Castle, Pa.  
4436 Toulouse St., New Orleans, La.  
P. O. Box 300, Norfolk, Va.  
1250 53rd St., Oakland, Calif.  
811-13 N. Broadway, Oklahoma City, Okla.  
2558 Farnam St., Omaha, Nebr.  
316 S. Jefferson Ave., Peoria, Ill.  
1920-22 Chestnut St., Philadelphia, Pa.  
404 Craig St., Pittsburgh, Pa.  
1015 N. W. Glisan St., Portland, Ore.  
29 Franklin Road, Roanoke, Va.  
205 St. Paul St., Rochester, N. Y.  
3414-28 Lindell Blvd., St. Louis, Mo.  
2446 University Ave., St. Paul, Minn.  
579 W. 2nd South St., Salt Lake City, Utah  
301 S. Flores St., San Antonio, Texas  
300 West Lake North, Seattle, Wash.  
806 Pierce St., Sioux City, Iowa  
320 Riverside St., Spokane, Wash.  
351-57 E. Onondaga St., Syracuse, N. Y.  
102 E. Lafayette St., Tampa, Fla.  
146-48 N. Market St., Wichita, Kansas  
(Also Toronto, Canada)



**Free!**

**DESCRIPTIVE BOOKLET  
MAIL COUPON TODAY!**

#### FRIGIDAIRE Service Parts Distributor

(Check list above for location of your Frigidaire Distributor)

Gentlemen: Please send me your Free Descriptive Booklet with full details, including prices, of the new Frigidaire Precision-Built Modulex Expansion Valve. I understand there is no obligation.

Name .....  
Firm .....  
Street Address .....  
City and State .....



## AIR CONDITIONING & REFRIGERATION NEWS

Trade Mark registered U. S. Patent Office;  
Established 1926 and registered as  
Electric Refrigeration News

F. M. COCKRELL, Founder

Published Every Wednesday by  
BUSINESS NEWS PUBLISHING CO.  
5229 Cass Ave., Detroit, Mich.  
Telephone Columbia 4242

Subscription Rates  
U. S. and Possessions, Canada, and all countries  
in the Pan-American Postal Union: \$4.00 per year;  
2 years for \$7.00. All other foreign countries: \$6.00  
per year. Single copy price, 20 cents. Ten or  
more copies, 15 cents each; 50 or more copies,  
10 cents each. Send remittance with order.

GEORGE F. TAUBENECK,  
Editor and Publisher

PHIL B. REDEKER, Managing Editor  
THEODORE T. QUINN, Assistant Editor  
Staff Reporters: JAMES McCALLUM and  
HENRY KNOWLTON

JOHN R. ADAMS, Business Manager  
JAMES B. SMITH, Advertising Manager  
ED HENDERSON, Circulation Manager  
M. HELEN COCKRELL, Credit Manager

Member, Associated Business Papers  
Member, Audit Bureau of Circulations

VOLUME 32, No. 10, SERIAL No. 624  
MARCH 5, 1941

Copyright, 1941, Business News Publishing Co.

## Why Deliveries Are Late

READERS of AIR CONDITIONING & REFRIGERATION NEWS should be well prepared—if not reconciled—to the idea of shortages of "essential" materials in the refrigeration industry. Such shortages have been predicted since the first issue of the year.

They have now appeared. They have been reflected in price rise on household refrigerators, in the elimination of some household models, and in slow deliveries of parts.

Further shipments of aluminum have been denied the industry—temporarily, at least. A delegation of refrigeration manufacturers visited Washington last week to plead for moderate allowances of aluminum during 1941.

### FIN COIL PRODUCTION JEOPARDIZED BY ALUMINUM LACK

Manufacturers of fin coils will be seriously affected by an aluminum shortage, because tools necessary for a change-over to copper or brass finned coils are not available—nor does it seem likely that any new machine tools can be had within the next many months.

Rubber and synthetic rubber ice trays are being prepared. The whole question of "why do we have ice trays anyway—who not some other method of ice production?" is being reviewed. Manufacturers using aluminum evaporators are turning to porcelain-on-steel. Philco has a plastic evaporator—which happens to be the largest thermoplastic moulding produced to date.

### NICKEL, COPPER, BRASS, TIN STOCKS GETTING LOW

Nickel is becoming scarce, which means that 18-8 stainless steel may have to be supplanted. Molybdenum, chrome, and tungsten are possible substitutes. Copper and brass sales are being restricted. Deliveries on sheet brass are particularly slow, and deliveries on brass forgings are as much as three to four months late.

Tin, used in soldering, is a bit scarce now, although plans to operate a smelter in America and use Bolivian tin may relieve this situation eventually. In the meantime, ways and means of using less solder are being weighed.

Readers of this page may be a little tired of our harping on plastics, but said "harping" has been getting results that they may soon appreciate tremendously. This field is really opening up now.

### JOBBER CAN'T EXPECT PROMPT DELIVERIES FOR AWHILE

For the next few months, jobbers must learn to be patient with regard to deliveries. Service they have become accustomed to receiving during the last few years simply can't be supplied today—and the manufacturers can't be blamed for the situation, unfortunate though it is for everyone concerned.

Jobbers can do their bit to help industry get geared up for the defense program by looking to manufacturers only to supply parts. In the past, many jobbers have expected manufacturers also to stock parts for them. Obviously, with the delivery situation being what it is, such a function now becomes difficult, if not downright impossible, for the manufacturer.

### USE STANDARD PRODUCTS AS FAR AS POSSIBLE

It will also be helpful (and patriotic) of various users of refrigeration parts if they will confine their wants and needs to standard products, instead of items which have to be made up especially. (This is something on which the industry has been "spoiled," as one observer puts it, because of the keen competition existing between parts manufacturers operating in a buyer's market.)

In these abnormal times, new tools, dies, jigs, and fixtures for special parts are practically unobtainable. Equally at a premium is time—and retooling takes enormously valuable time.

### REFRIGERATION ESSENTIAL TO HEALTH & WELFARE OF NATION

Because refrigeration is so essential to the health and welfare of the nation, industry leaders feel confident that plenty of materials will be available eventually to keep the industry going at a good clip.

In the meantime, to speed up deliveries, research now going on may lead to new applications, new materials, and especially new styling which will give the industry a genuine lift. Particularly in cabinet design (both household and commercial) it is predicted that obsolescence will be hastened by the employment of new materials and new techniques in coming months.

A little patience on the part of jobbers and dealers, then, may be rewarded substantially later.

It's a great industry we're in—an industry that doesn't take blows lying down. It has more than its quota of brainpower, and that brainpower is now functioning at high speed.

Results should be interesting.

## LETTERS

### HERMAN (DE MILLE) GOLDBERG PUTS THE INDUSTRY IN PICTURES

Herman Goldberg Co.  
20 N. Wacker Dr., Chicago, Ill.

Dear George:

I have just roughly completed the movie reels covering the recent All-Industry Exhibition. All of the shots came out very well in color, and I was also able to successfully

## They'll Do It Every Time . . . . . By Jimmie Hatlo



obtain good colored movies of every act of the dinner show.

As usual, in taking pictures of the booths I tried to get as many of the factory men who represented the various booths in the pictures and believe that I have a picture of every booth, although it is fairly possible that I may have missed one or two. Incidentally, the pictures of your own booth came out wonderfully well, and I was able to take some excellent shots of the crowds which continuously passed by your section.

I have already received requests from more than 35 organizations throughout the country asking for dates on which we can schedule this film for local showings, and will try to arrange the schedule this year so that there won't be too much time lost in transit in between showings.

To my surprise there are still requests for the 1940 convention film, and as a matter of fact, in checking our schedule on last year's movies, I find that it has been shown from coast to coast 139 times to date.

I know that you are also quite a picture-taking enthusiast, and I believe it will interest you to know that I took over 2,200 feet of Kodachrome A 16 millimeter film, and in taking these shots I must have gotten a good percentage of the people who attended the show at one time or another. I had extremely fine cooperation from the Eastman processing plant here in Chicago in that they made a particular exception of me by returning colored film that I sent in up to 2:00 o'clock Tuesday so that I was able to show it at the R.S.E.S. Rodeo party the following Wednesday evening. They also gave me very fine service on black and white film, which enabled me to also show certain shots Wednesday evening taken up to 10:00 o'clock that same morning.

I was very gratified during the convention when I was told by quite a number of people that their interest in the 1941 convention was aroused after they had seen the pictures of the 1940 show.

The movies taken of the speakers' table during the banquet were from approximately 100 feet, but came out pretty good because of the new telescopic fast lens which is a part of my equipment, and the show was taken from about 75 feet, and, as I have stated previously, has been very nicely reproduced in the movies.

Other shots of the jobber-manufacturer luncheon, over which you presided, came out very well, as well as those of jobber and R.S.E.S. meetings.

HERMAN GOLDBERG

**Publisher's Note:** Photography is an expensive hobby, as many can testify; but to Herman Goldberg it is more than a hobby. His moving pictures of industry functions are his contribution to an industry which has treated him well. As time goes on, these movies will become more and more valuable as a pictorial record of one of the liveliest industries of our time.

### OTTO KLOPSCH ADVOCATES A BIGGER A.S.R.E.

Wolverine Tube Co.

Dear George:

I believe that my reason for wanting but one society covering the refrigeration and air conditioning field is obvious. I have always thought of refrigeration and air conditioning as one industry, and in this industry there are different kinds of activities—engineering, manufacturing, selling, and servicing.

Recently a new association has been formed in the air conditioning field. Are we going to sit idly by and allow the refrigerating and air conditioning fields to become divorced when they are so closely connected?

I think it would be better to have the engineers, the sales people, the parts manufacturers, the service people, etc. of the refrigeration and air conditioning industry contribute to one big association; and then this association could have an annual meeting lasting perhaps a week, during which time they could hold a national show.

At the meeting there could be talks on all the various activities of the industry. The sales people would have an opportunity to hear what the engineers are doing, and vice versa, and the service people could learn of the activities of the engineers and the sales people. There could be a continuous exchange of ideas so that every member of such an association would profit from the work and experience of others in the industry.

For instance, the American Society of Metals is an excellent example of what can be accomplished when one big society encompasses all the activities of one industry. Fifteen years ago they had approximately 2,000 members, at which time their membership was limited to metallurgical people. Sales people had to take associate memberships and could have no voice in the Society—the same as we now do in the A.S.R.E.

Since broadening the activities of their Society and allowing all to take full memberships, they now have approximately 10,000 members.

Their memberships cost \$10 per year, which means that they now have an annual income of around \$100,000. They conduct the national show, the last one of which was held in Cleveland. It is my understanding that they had to use all of the available capacity of the huge municipal auditorium for exhibit purposes. This allowed them to have a broad exhibit of all the products of the metals industry.

Incidentally, it resulted in a profit to the Society, which further enables them to serve their industry.

If the activities of our Society are broadened as I have suggested, the engineers could still have all their monthly meetings just as they do now, but these meetings wouldn't necessarily have to be on engineering subjects; they could encompass sales viewpoints, servicemen's viewpoints, which would, in turn, broaden the engineers' viewpoints in connection with their own work.

After all, everything which an engineer designs must be very definitely designed with a viewpoint as to what the sales department can do with the product and what the servicemen must do to service it. I believe that a meeting attended by representatives of the sales and service people, etc. of the industry as well as the A.S.R.E. engineers, at which the value of such a program is freely discussed, might be the first step in deciding whether or not such a program would be advisable; and I recommend that such a meeting be held in connection with the next spring meeting in Cincinnati.

I certainly hope that if you publish this letter my many friends in the A.S.R.E. will not feel that I have gone too far. As you know, I have already suggested this matter to them.

It is farthest from my thoughts to offend anyone, but this is such a broad subject that I feel that unbiased discussion by all the members of the various activities of the refrigeration and air conditioning industry would contribute much towards accepting or rejecting such a program.

Yours very truly,  
OTTO Z. KLOPSCH

**Answer:** What's your thought? The editorial page of the NEWS, which has for more than a decade been the Forum of the Refrigeration Industry, is open to your comments on this hot subject.



## Distributor-Dealer Doings

### Overland Furniture Co. Expands Appliance Dept.

TACOMA, Wash.—One year's experience in actively selling major appliances proved so successful for Overland Furniture Co., established here more than forty years ago, that a new appliance department was recently established at 1138 Commerce St.

For a formal showing which was held for eight days after the opening special factory demonstrations of ironers, tumbler clothes driers, ranges, washing machines, and refrigerators were arranged by Leon D. Mills, appliance manager. An attendance gift was given each day.

In constructing the new department a complete new concrete floor was laid. Combination fluorescent and semi-indirect lighting is used.

The firm, which handles General Electric, Zenith, and Easy appliances, is operated by T. O. Overland.

### Baden Refrigeration Co. Holds 'Open House'

BADEN, Mo.—Open house to celebrate completion of its new building at 7948 N. Broadway here was held recently by Baden Refrigeration & Sales Co., General Electric appliance dealership.

Letters to 1,000 former customers offering souvenir measuring glasses during the celebration resulted in sales of the entire leftover stock of 1940 appliances.

### Daniels Quits Keystone For C. of C. Post

HARRISBURG, Pa.—B. L. Daniels, former sales manager for Keystone Refrigerators, Inc., has been named industrial secretary of the Harrisburg chamber of commerce.

### Utah League Elects Leaders For 1941

SALT LAKE CITY—G. Wayne Stillman, vice president and general manager of Radio Studios, Inc., has been elected president of the Electrical League of Utah, succeeding Orson John Hyde, Salt Lake City district manager for Mountain States Telephone & Telegraph Co.

Other officers named were E. J. Duggan, vice president; Ora H. Barlow, secretary-treasurer; and Elias J. Strong, manager.

Trustees are: F. E. Bodine, G. H. Waite, Lester B. Johnson, and Raymond Ackerman, representing manufacturers; H. W. Eskuche, Walter Widdison, Will O. Smith, and Mr. Duggan, representing wholesalers; O. R. Bigelow, C. W. Gilner, W. C. Hollingworth, and Mr. Stillman, representing dealers; Harry H. Hall, J. C. Jacobs, J. Vernon Sharp, and Kimball Vance, representing contractors; and W. A. Huckins, C. A. Wolfrom, Mr. Barlow, and Mr. Hyde, representing utilities.



Dr. Henry Lee Smith, dialect detective of the "Where Are You From?" radio show, and the twins he is testing to indicate influence of environment on speech patterns. Dr. Smith broadcasts on WOR under sponsorship of Rex Cole, Inc., G-E distributor. Left to right: Ruth and Helen Ingraham, 18; Janet and Nancy Scott, 22; Dr. Smith; Grace and Ruth Iversen, 19; and Eileen and Edna Reeke, 18.

### West Penn Data Shows Sales Were Up 56%

PITTSBURGH—Gains of more than 56% in refrigerator sales and of nearly 50% in range sales over 1939 have been reported by West Penn Power Co. for dealers in its territory last year. These two items topped the list in a year that saw West Penn dealers effect sales gains all along the major appliance front.

Dealer sales of refrigerators last year totaled 22,914 units, according to the utility's figures, compared to 14,627 units for 1939. Range sales last year were reported at 3,823 units, against 2,551 for 1939.

These figures are estimated totals, based on actual sales reports submitted to the power company by a majority of the dealers in the area which it serves. The utility estimates that the reporting companies account for all but 12% of total appliance sales in the territory.

A more complete tabulation of these projected totals for both 1940 and the previous year follows:

Appliance	Est. Unit Sales For 1940	Est. Unit Sales For 1939
Refrigerators	22,914	14,627
Ranges	3,823	2,551
Water Heaters	486	303
Washers	19,742	17,052
Ironers	1,883	1,563
Vacuum Cleaners	8,449	7,047
Radios	39,069	33,532
Dishwashers	39	86
Stokers	838	502

### Dyas, Rex Cole Veteran, Opens Hartford Store

HARTFORD, Conn.—Dyas Appliances, Inc. has been opened at 155 Asylum St. here as General Electric dealer. Joseph Dyas, connected for 12 years with Rex Cole, G-E distributor in New York City, heads the concern. Ten salesmen are employed by the store, which has latest type lighting fixtures and is decorated in two-tone green with a background of red and purple draperies.

### Owners of Old Ranges Get Higher Trade-In Offers

MARION, Ill.—Owner of the oldest electric range in this city and county will be given double trade-in value on a new Hotpoint range, in a contest now being conducted by Marion Appliance Co. Other prizes for old ranges still in daily service include electric fans.

This county was one of the first completely electrified, according to Harold Fisk, manager of the dealership, and newspaper advertising is playing up that fact.

### Braid Electric Is Host To Norge Dealers

NASHVILLE, Tenn.—Braid Electric Co., Norge distributor, recently entertained dealers at the Noel hotel in connection with the showing of 1941 models. Factory representatives present were Art Kitson, sales manager of the electric range division, and George Nachtrieb, territory manager.

## Count Your Old Customers as Cashable Assets

# Deepfreeze

## You can Sell 'em all over again!

As a dealer, your biggest assets are not your equipment and inventories, but the *people* you have sold. Whether you have ten or ten thousand, your owners are your stock in trade. What have you to sell them? Can you sell a new refrigerator, range, or washer to last year's buyer? Certainly not. Yet, with nothing new to offer them, they are *frozen assets*... their good-will means little—for years to come.

**Deepfreeze** will turn your owners into buyers. It is the new necessity for the modern home. It justifies its purchase by the savings it effects and by the better food that it provides.

- 1 A new product—revolutionary and non-competitive—yet tried and proven!
- 2 An appliance that saves more than it costs! You can prove to your customers a saving of \$10 to \$15 per month.
- 3 An appliance that gives better living—cheaper!
- 4 An appliance that sells easily on demonstration!
- 5 A unit of sale over \$200!
- 6 A real—a bankable profit on each sale!

**Deepfreeze** IS "going places"... ARE YOU?

Deepfreeze spent 1940 proving its product and its market... and 1941 will be a year of VOLUME and PROFIT!

**Deepfreeze** has complete national distribution... large wholesale stocks are available for immediate shipment to your store.

**Deepfreeze** national advertising is now at work. Smart promotional material—usable sales tools—direct mail pieces—are all ready for use in your store and in your territory. In 1941 aggressive Deepfreeze Dealers will reap a golden harvest!

**DEEPFREEZE DIVISION MOTOR PRODUCTS CORPORATION**

**Deepfreeze**  
FROZEN-FRESH FOOD SAVER  
AND MEAT FREEZER

Deepfreeze has a barrel of sub-zero freezing and storage capacity—18 inches diameter by 30 inches deep (all actual primary freezing space)—ample room for a hind quarter of meat, assorted institutional size packages of frozen-fresh fruits and vegetables, and a commercial can of ice cream.

The freezing unit is the entire double wall surface of the food compartment—24 square feet of primary freezing surface. Factory set to operate at zero and sub-zero temperatures regardless of room heat, Deepfreeze can be set to maintain cold as low as 20 degrees below zero.

New freezing principle gives maximum cold-making efficiency. Electricity consumption is about same as ordinary refrigerator.

**Deepfreeze**  
Will Bring Your Preferred Customer List to Life!  
Maybe Your Territory is Still Open

**ACT NOW** PHONE, WIRE OR MAIL THIS COUPON

Deepfreeze Division Motor Products Corporation  
2303 Davis Street, Dept. 61-AC, North Chicago, Illinois

Please send booklet: "Today's Opportunity for Appliance Dealers."

Firm Name.....

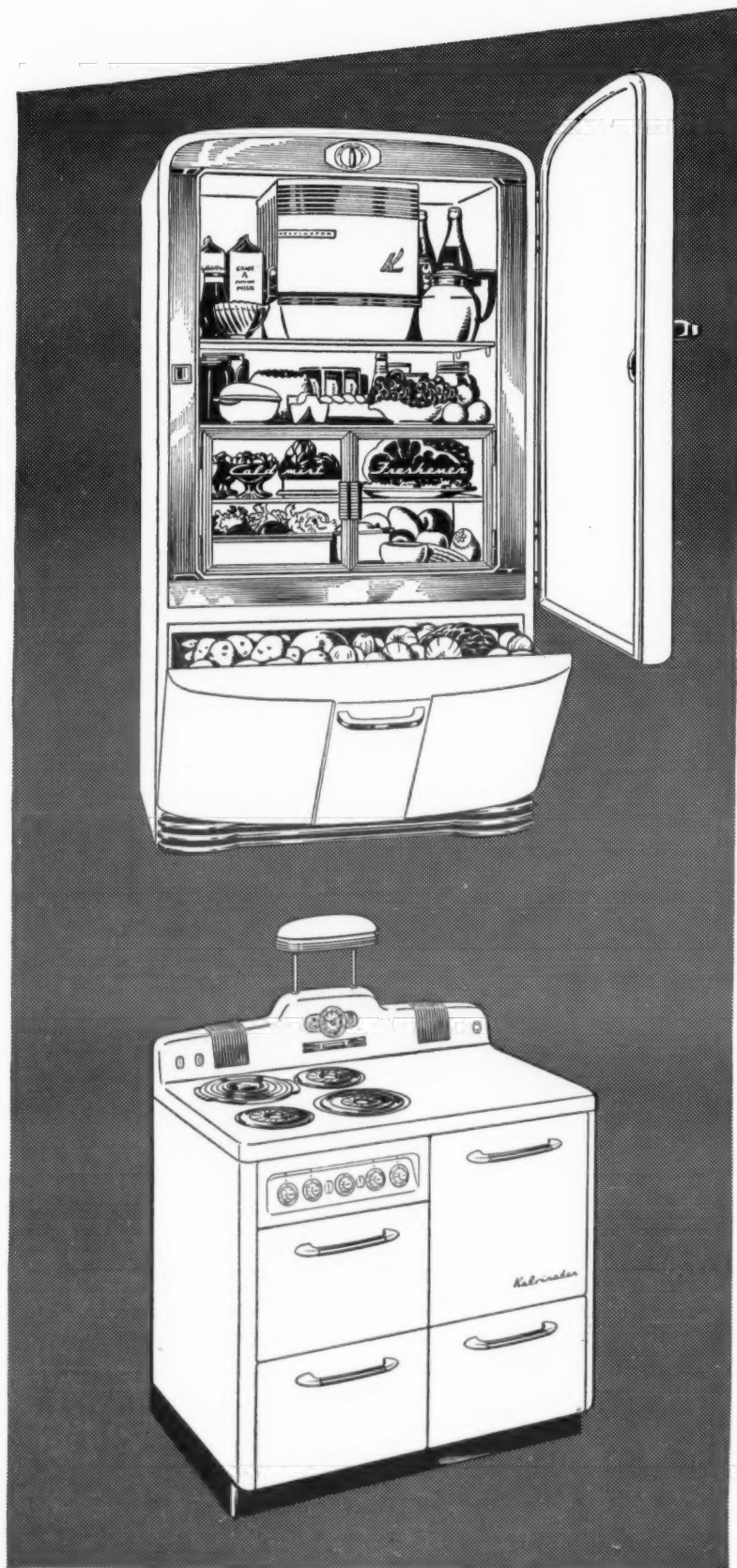
Street.....

Town..... State.....

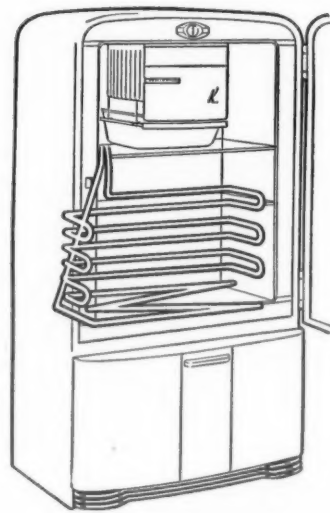


# Postal Telegraph

ELECTRIC APPLIANCE RETAILERS, U. S. A.  
 REVOLUTIONARY NEW KELVINATOR  
 RECORDS . . . MOIST-MASTER SALE  
 SALES AND ARE MOUNTING STEADILY



As an Essential Feature of Kelvinator's Long-Range Program—  
 Kelvinator Refrigerators and Ranges  
 are Manufactured by a "Retail-Minded" Organization—  
 they are Manufactured to Sell!



A major point in Kelvinator's long-range program of planned and organized manufacture and distribution is its attitude toward *product*—either refrigerators or ranges.

Kelvinator refuses to be complacent. It refuses to accept the status quo. It realizes that successful appliance selling is based on sound change.

We here at Kelvinator call this attitude "retail-mindedness."

Typical of this retail approach to *product* is the 1941 Kelvinator Moist-Master—the outstanding product achievement of the year and a powerful incentive for the replacement mar-

ket. It *looks* different — and it *is* different.

In addition to the High-Speed Freezer, a separate set of refrigerating coils, concealed within the walls, maintain ideal temperature and humidity throughout the cabinet. All shelves are of crystal-clear glass. And a glass-enclosed Cold-mist Freshener provides super-moist refrigeration for uncovered left-overs, desserts and leafy vegetables.

Already the Kelvinator Moist-Master accounts for over 20 per cent of all sales.

It pays to tie up with a "retail-minded" organization.



# graph

ATR MOIST-MASTER BREAKING ALL  
LE ALREADY ARE OVER 20% OF TOTAL  
TEDILY.

## Check These Kelvinator Franchise Advantages Against Any Other

**1 EXCLUSIVE EXTRAS . . .** No other refrigerator offers the exclusive new Magic Shelf—the Stainless Steel Cold-Ban—the Glass-enclosed Cold-mist Freshener cooled by coils within the walls of the refrigerator. And the 1941 Kelvinator Ranges offer new, exclusive features at the lowest prices in history.

**2 STEP-UP PLAN . . .** A logical step-up plan based on the actual retail value of each added feature. The *higher* priced models, in both refrigerators and ranges, are easy to sell.

**3 NEW LOW PRICES . . .** Last year Kelvinator's new price policy revolutionized the industry. This year, step number two in our long-range program reduces refrigerator and range prices even farther, and greater values have been built into every model in the line.

**4 HIGH UNIT SALES . . .** Last year the average of 80 per cent of all Kelvinator retailers' sales was \$160—which we believe sets an industry record. With this year's amazing step-up plan Kelvinator retailers will again sell an overwhelmingly big per cent of higher-priced refrigerators and ranges.

**5 SIZE . . .** One of Kelvinator's most important *extras* is size. Six cubic foot refrigerators are now six and three-quarter cubic feet—and eights are eight and three-quarter cubic feet—thanks to Kelvinator's new cabinet construction. And all ranges have big, *oversize* ovens.

**6 SELECTIVE MARKETS . . .** Kelvinator's 1940 policies, carried forward into 1941, have earned for Kelvinator the reputation of putting into actual practice—"a market for every dealer—a dealer for every market".

**7 FEWER MODELS . . .** By concentrating on the models people really want, Kelvinator has reduced its refrigerator line to *nine* models—its range line to three—and thus reduced the retailer's investment to a minimum and simplified his selling problem.

**8 SERVICE-FREE . . .** The Polarsphere Sealed Unit has set a record for reliable performance. Of the hundreds of thousands of Kelvinator refrigerators sold last year, less than one-half of one per cent were returned to the factory for service.

**9 REPLACEMENT SALES . . .** The new and radically different 1941 Kelvinator Moist-Master with its glass shelves and Cold-mist Freshener, offers the most powerful replacement incentive in years. And every 1941 Kelvinator is a *brand new* model. Not one is a relabeled carry-over from 1940.

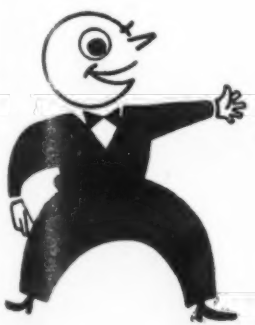
**10 ADVERTISING AND PROMOTION . . .** The biggest campaign in Kelvinator's history is already under way with four-color magazine advertising—key city newspaper and transcribed radio spot announcements—new style billboard posters and complete cooperative advertising materials. Selling and product literature is printed in *full-colors*.

**11 STOCKING . . .** Kelvinator's Redisco Plan for 1941 provides the most flexible and liberal method of stocking refrigerators and ranges you have ever been offered.

**12 PLANNED DISTRIBUTION AND MANUFACTURING . . .** A long-range program developed by a "retail-minded" organization to help retailers build an increasingly profitable business.

Kelvinator Division

NASH-KELVINATOR CORPORATION, DETROIT, MICH.



Get  
More

Get

# KELVINATOR



## Roasters Carry Food To Restaurants



Electric roaster-ovens are used to take hot food from the cooking center of Oscar's chain of restaurants to the five units in the chain. Food is prepared in advance and kept hot in 17 roasters. Oscar's serves 2,200 meals a day—from lunches to full-course dinners.

### Motor-Scooter Speeds Roasters to Chain

NORTH PLATTE, Neb.—To solve the problem of transporting hot food from a central cooking unit to a chain of restaurants, Oscar's, five-unit chain here, uses Westinghouse electric roaster ovens.

Expanding on the steam table idea, all food is prepared in advance and is kept hot in 17 roasters which are delivered to the restaurants by motor scooter. Oscar's, with 35 employees, serves 2,200 meals a day, ranging from delicatessen lunches to full course dinners.

This chain of restaurants is believed to be the first to use this method to distribute food from a central cooking station.

## Refrigerators Sell Best Outside of Department

ST. LOUIS—An anomaly which is puzzling Major Appliance Buyer R. G. DeHart of Stix-Baer-Fuller, department store here, is the fact that his department, considered one of the best designed for selling in St. Louis, has consistently registered more sales of refrigerators when they are shown outside the department.

Last year, Stix-Baer-Fuller adopted the policy of showing an occasional new refrigerator at some heavy-traffic point in the store, such as just inside the front entrance. Each model was sold in half the time required on the standard home appliance floor.

It has been the department's policy to station a salesman on the "outside display" to answer questions, and jot down the names of interested prospects.

Success obtained in this way was so consistent that the store placed a small major appliance department on the first floor for one month, and closed 33 sales of refrigerators, ranges, and washing machines in a single week. The branch department had to be discontinued, however, because of lack of space.

In connection with a showing of kitchen utensils, Mr. DeHart placed a 6-ft. refrigerator on display, and found that five were sold to housewares customers.

When these results were tabulated at the end of the year, the major appliance department was encouraged to display ranges, refrigerators, and washing machines on every floor of the store, making a total of 16 locations in all.

## From Kitchen to Table—Via Roaster

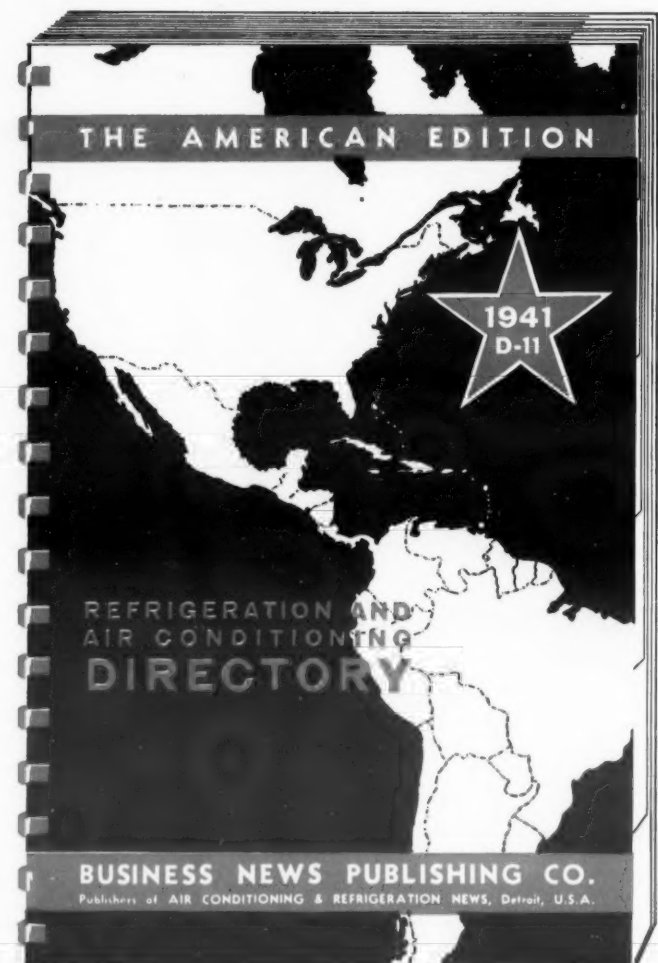


Complete meals cooked in electric roasters and served hot at the tables are offered by Gammon's restaurant in Pittsburgh. Above shows meal being served to diners directly from a roaster. Below is shown battery of roasters in the basement kitchen with food being cooked.



When you want to know

## Who Manufactures These Products:



- Cabinet Finishes
- Capillary Tubing
- Carbonators
- Central Air Conditioning Systems
- Centrifugal Air Conditioning Units
- Coin Operated Refrigerated Dispensing Machines.
- Evaporative Coolers
- Flow Meters
- Freezer Storage Refrigerators for Farm Use
- Hermetically Sealed Condensing Units
- Ice Cube Cutters
- Liquid Line Throttling Valves
- Miniature Motors
- Odor Absorbers
- Plastic Materials (and Molders)
- Portable Ice Cream Counter Freezers
- Purgers
- Self Locking Screws
- Truck Refrigeration Condensing Units
- Water Vapor Condensing Units

## The 1941 REFRIGERATION AND AIR CONDITIONING DIRECTORY

lists nearly 900 manufacturers of more than 500 types of air conditioning and refrigeration equipment. Manufacturers of the 20 products listed above are given in the Directory for the first time.

Directory D-11 lists manufacturers' products under four sections: Air conditioning equipment, commercial refrigeration equipment, household refrigeration equipment, and parts, materials, and supplies. More than 300 refrigeration supply jobbers are listed in the fifth section.

This book is an invaluable guide to anyone wishing to purchase any kind of air conditioning or refrigeration equipment. One hundred twenty of the leading manufacturers have advertisements in the Directory describing and in many cases illustrating their products for your information.

The Directory has 198 pages, is 6½ x 9½ in size, printed in red, white, and blue, and is plastic bound with a visible index separating each section.

The price is \$1.00 per copy in the U.S.A. or it may be obtained FREE with a year's subscription to Air Conditioning & Refrigeration News at the regular price of \$4.00. This offer expires April 1, 1941. Use the coupon.

Business News Publishing Co.  
5229 Cass Ave., Detroit, Mich.

Date.....

- ☐ Please enter a year's subscription (52 issues) to Air Conditioning & Refrigeration News and send me a free copy of the 1941 Directory. I enclose \$4.00.
- ☐ Please send 1941 Directory only. \$1.00 enclosed.

Name .....

Company .....

Address .....

## Dealer Builds Electric Restaurant Serves Meals Sales By Taking Gas Cooked In Roasters Units as Trade-Ins

CLEBURNE, Tex.—Down here in this rural community there's an appliance dealer who has adopted some of the technique of David Harum, wrapped it up in perpetual selling motion, and powered it with REA lines.

He's W. J. Layland, owner of Layland Plumbing Co., who takes butane gas appliances in trade for electrical appliances—then sells the gas appliances all over again.

Since the advent of REA in this area opened up the rural market and put dealers in the farm territories in a position to finance the appliance paper of the farmer buyer, Mr. Layland has worked on a system.

### CHECKS NEW USERS

He first makes a check of the new user of REA current, and in most cases can show the consumer that he is not using sufficient power to measure up to the minimum for which he is being charged. Here is presented the opening for the discussion of the sale of an electric refrigerator or range. In many instances, the prospect may have been using a gas refrigerator, employing either natural or butane gas. He may also have a gas range, usually butane fired.

The gas-fired pieces of equipment are taken as part payment on electrical equipment. The used, gas-fired equipment is then displayed, sold, and sent out to act as bargaining pieces for future sales of electrical equipment.

On the display floor is kept a display of both electrical and gas-fired equipment. When the fair is in progress another display of appliances—electric and gas—is set up. Thus, virtually every farmer in the area gets an "eye picture" of the appliances available.

### EQUIPMENT IS WORKING

Equipment in the store display is kept in working order so that a demonstration of any of the equipment can be made on the spot. The many new homes going up in the rural district under the FHA plan provide many new prospects. Some want electric service, while others are looking for gas-fired service for appliances.

This demand for both types of appliances keeps Mr. Layland busy installing new electrical or gas-fired appliances, taking the gas-fired units in trade, and re-selling the trade-ins.

PITTSBURGH—A brand new type of restaurant service—complete meals cooked in electric roasters and served piping hot at the table—was introduced recently at the new Gammon's restaurant in Oakland, Pittsburgh.

The electric roaster service was conceived by Ros Gammon, veteran of 34 years in the food service business, with the cooperation of Westinghouse Supply Co. of Pittsburgh, and Miss Gwen Griffith, Westinghouse home economist.

Called the "electric roaster-oven restaurant," Gammon's features the roaster-cooked meals, in addition to the regular menu. In the basement of the restaurant is a battery of 18 Westinghouse roasters where the meals are prepared. In addition, a roaster is in operation in the window of the restaurant, and this roaster serves as a display as well as being used to prepare the meals.

When the meal is cooked, the roaster may be wheeled to the patron's table for individual service direct from the electric roaster. The roaster may be plugged in right at the table so that the food can be kept hot.

In addition to the roaster service in the restaurant, Gammon's announced a plan for direct home service.

Completely cooked meal is delivered to the home in the electric roaster. It is also planned to offer the service of complete dinners cooked in roasters to be delivered to parties, hotel rooms, and picnics.

## MKB Publishes Guide For Architects

NEW YORK CITY—As an aid to architects, who more and more are specifying just what appliances are to be placed in the kitchens of the houses and housing projects they are designing, Modern Kitchen Bureau has published a 20-page booklet entitled "The Principles of Modern Kitchen Planning."

Photographs and floor plans of actual kitchens in large and small homes, apartments, and farm houses are shown. The six fundamental arrangements of kitchen appliances and lighting, wiring, cost of equipment, and financing are considered in detail.

Also included is up-to-date information on how to organize the kitchen for efficient flow of work, how to estimate storage cabinet space, and other data.



## Electric Institute of Washington Puts Out 'Consumer Information' Appliance Labels

(Concluded from Page 1, Column 2) salesman, particularly a less experienced one, to give an orderly and convincing presentation of his merchandise.

Distributor members of the institute receive the tags in blank, and then fill them in and give them to retailers. Reference copies of the data to be transcribed to the tags are kept in the distributors' offices on forms supplied by the institute.

The tags are folded once, providing a four-page form. The cover carries the emblem of the institute, the words "Consumer Information Covering" (type of appliance), and blanks for make, model, and price. The two inner pages provide space for detailed specifications of the individual appliance, and the fourth page carries information on cost of operation and benefits of use.

### What the Institute's Range Label Tells

#### HEADINGS

##### General

##### Type Current

Is it a.c. or d.c.? If available at d.c. for extra charge, state the fact and give price.

##### Dimensions

What are the outside, overall dimensions?

##### Exterior Finish

Is the finish porcelain, porcelain enamel, or other? If the cooking top is one finish, such as acid-resisting porcelain and sides another, indicate same.

##### Style

Does the range have legs or cabinet base? If divided top, indicate this also.

##### Hardware

Of what material and color is hardware? Is it bakelite, chrome, or white plastic, etc.?

##### Appliance Outlet

How many? None or one or two? Indicate if outlet is time-controlled.

##### Warmer

State Yes or No. Say Yes only if warmer is included at given price. If not included but available, indicate the additional cost, such as \$2.75 extra.

##### Storage Drawers

#### Surface Units

##### Type

Give general type such as "open" or "closed" or "solid," and indicate trade name.

##### Size

Give size of units in inches. (2) 6" and (1) 8". If there are two units of equal size but the wattage distribution is not identical, indicate each unit separately so that the wattage can be outlined below.

##### Wattage

Give size of well cooker in quarts. If well cooker is not on range but available, state price difference. Example: \$5.00 extra.

##### High

What is wattage output for each unit on each speed? If your range has more than 5 speeds, start listing above "High" and list in order.

##### Medium

##### Low

##### Simmer

##### Lowest

##### Surface Signal

Is there a surface signal light and how many? Special features, if any.

##### Switches

Give color and material. Type of contact points. Special features.

##### Location

Are switches on front panel or back splash? Any special features?

#### Oven

##### Size

What is the overall maximum size of oven including the space taken up by units?

##### Interior Finish

Indicate finish; porcelain or other. Also rounded corners or other features.

##### Number of Units

How many?

##### Type of Units

Are units open or closed and what is trade name?

##### Wattage (Upper and Lower Units)

What is wattage on each position of oven switch? Space is allowed for second heating position under Bake and Broil.

##### Preheat

##### Bake

##### Broil

##### Type of

Is it hydraulic or bi-metal? Any special features?

##### Thermostat

##### Broiler Pan

State material and type such as "smokeless" and any special features.

##### Shelves

State material, number bars, lock stop feature. Any special features?

##### Oven Switch

What type? Is it a separate switch or a combination switch and temperature control?

##### Signal Light

State Yes or No. You might say "Yes, off when using stored heat."

#### Additional Features

##### Light

Is there a lamp for illumination of surface of range? State Yes or No. Give price if available at additional cost.

##### Timer

Yes or No. Give price if available at additional cost.

##### Minute Minder

Yes or No. Give price if available at additional cost.

##### Condiment Set

##### Extra Oven

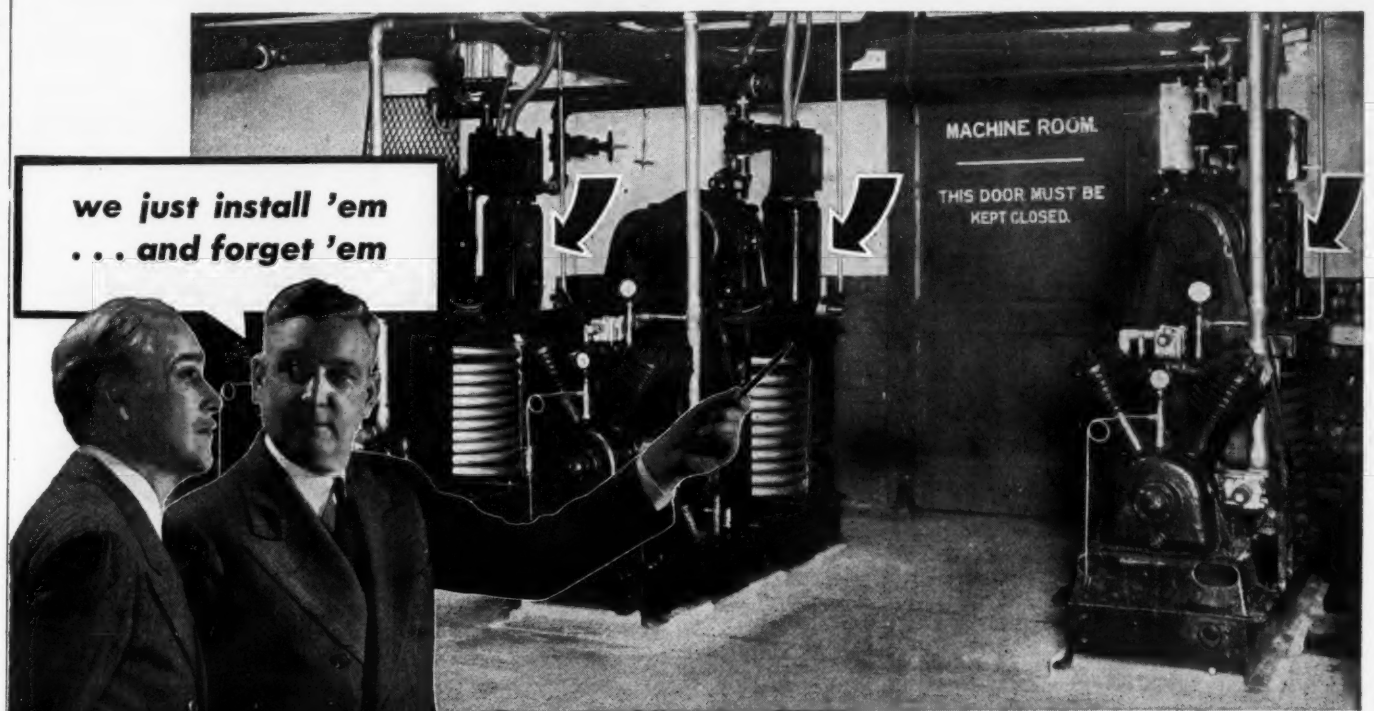
Yes or No. Size if yes, also number of units if yes.

##### Extra Broiler

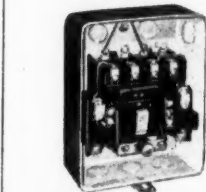
Yes or No, and special features. Wattage.

##### Extras

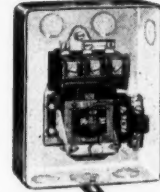
Special features, such as Light in Oven, Triple-Oven, etc. If there are extras available for additional cost be sure to indicate price of same. Also indicate warranty.



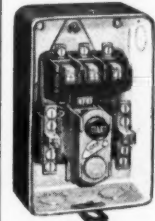
### A-B Controls are good for Millions of Operations



**Automatic Polyphase Starter**  
Bulletin 709, Size 0—  
Across-the-line starter  
for squirrel-cage motors.



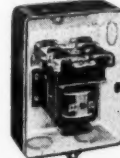
**Single-Phase Starter**  
Bulletin 709SP—Solenoid  
type switch for self-starting  
single-phase motors.



**Manual Starter**  
Bulletin 609—  
Size 0 Across-the-  
line starter. Two  
breakers protect  
against overloads.



**Pressure Control**  
Bulletin 836—  
Precision switch  
for both pressure  
and temperature  
control. Rugged.



**A-C Relay**  
Bulletin 700—A  
compact, inex-  
pensive, reliable  
switch rated up  
to 10 amperes.

## "There's no maintenance on these Solenoid Starters"

"Starter trouble used to cause many of our motor shut-downs . . . but not any more," said the plant engineer.

"How did you fix it?" asked the president.

"We changed over to Allen-Bradley solenoid controls."

"Why did that cure the trouble?" inquired the president.

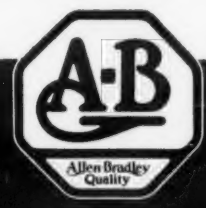
"Because these starters have double break, silver alloy contacts," replied the plant engineer. "They never need any attention. We just install 'em . . . and forget 'em. There's no maintenance of any kind on 'em."

This enthusiastic user of Allen-Bradley solenoid controls also could have added that there are no bearings, pivots, pins, or hinges to stick . . . no flexible jumpers to break . . . no concealed wiring. These dependable starters do not "kick out" even if there are considerable line voltage fluctuations.

White interiors, many knockouts, and ample wiring space are features that please the electrician. Complete information on Allen-Bradley trouble-free refrigeration and air-conditioning controls will be sent on request.

Allen-Bradley Company, 1313 S. First St., Milwaukee, Wis.

## ALLEN-BRADLEY SOLENOID MOTOR CONTROL



## St. Louis Dealer Puts Up Separate Store To Sell Used Refrigerators At a Profit

(Concluded from Page 1, Column 2) than-average profit.

Up to March of last year, the company did not merchandise trade-in appliances—disposing of trade-in units to independent service firms, who would recondition the better units and sell them to friends and other prospects. Then Mr. Markland, who had long been studying the problem, decided that if service firms could sell used appliances at a profit, with only limited sales facilities, there was no reason his firm could not do likewise.

So Mr. Markland built a separate trade-in store—a 15 x 11 shop constructed of brick and wood framework, with an all-glass front of window glass set in steel frames. With wiring, foundation, flooring, and

fluorescent light, this separate shop cost Mack Electric only about \$500.

Located on a busy main avenue, the Mack building and its small used-appliance shop, brightly lighted to bring the interior into plain view, attracts much attention. All better-appearing or more recent-model trade-in refrigerators are shown just back of the glass front.

The shop will accommodate 20 units, with some five or six ranges or washing machines included with refrigerators. On the glass windows are painted three-color signs every week, which give the name, price, and guarantee of the "featured" model for that week. Prices range from \$49.50 up to \$100, with the largest number of units sold at the \$49.50 mark.

This price arrangement has had a double advantage, in that a great many prospects who ordinarily buy new refrigerators will also step over to the trade-in store and select another for country homes, clubs, fishing lodges, and other locations. Last summer this market surpassed even that of apartment house owners, a good source of prospects for smaller 4 and 5-foot sizes.

All "stock" in the trade-in store comes from appraisals by Mack's five regular salesmen, who are trained to appraise the ultimate selling value of each model. If the refrigerator will require compressor, coil, or other unit repairs, it is sent to a refrigeration service firm under contract to Mack, where these repairs are made at an average cost of \$10. If only electrical repairs, such as motor armature, bearings, or bushing replacement are needed, it goes to the Mack electrical shop.

Salesmen spend two evenings a week on call for this shop, in addition to a day in the main store.



## Around the Corner from Anywhere

## Artic

The Preferred METHYL CHLORIDE for Service Work

Prompt Shipments from Convenient Stock Points



For information about nearest source of supply, write to: THE R. & H. CHEMICALS DEPARTMENT • E. I. DU PONT DE NEMOURS & Co. (INC.) • Wilmington, Delaware  
or NATIONAL AMMONIA DIVISION • Frankford, P. O. • Philadelphia, Pa.



## More 'Refrigerator Dealers' Show Profit Than Other Retailers

### Dun & Bradstreet Analyzes 1939 Operating Experiences of 391 Appliance Stores

NEW YORK CITY—Lower expense ratios and greater realized markup (% of cost) and inventory turnover were the distinguishing marks of profitable dealers in the survey of 1939 operating averages for 391 electric and gas household appliance stores made by the Dun & Bradstreet research and statistical division.

An analysis of the complete profit and loss statements showed that 60% of the firms reported a profit for the year.

Cost of goods sold was 62.6% for profitable firms, compared with the average of 64.7%; their total operating expense was 30.4% compared with 32.8%; and their realized markup was 59.8% compared with the average for all stores of 54.6%.

#### TURNOVER VARIES WIDELY

Inventory turnover, which varies with volume of business handled and the size of the community in which the store is located, ranged from 2.7 to 8.2, with the national average of profitable stores being 4.9 compared with the total average of 4.6.

The number of stores operating on a cash basis (selling more than 90% of goods for cash) was only 16. A total of 272 stores reported that

they sold on open credit (charge accounts) with these sales being 25% of their total, while 273 concerns offering instalment credit had 55% of their sales in this category.

A separate survey of 173 household appliance stores, 50% or more of whose sales were on instalment, shows that 113 operated at a profit for 1939, while only 37 of the 75 concerns doing open credit business (50% or more) showed a profit.

Instalment selling stores had a higher cost of goods sold, lower total expense, and lower realized markup than did open credit stores.

#### COST OF GOODS SOLD

Cost of goods sold averaged 66% for instalment concerns, compared with 60.6% for open credit stores. Total expense was 31.6% compared with 39.4% for open credit stores, while the realized markup was 51.6% for instalment stores, compared with 65.1%. Instalment stores, however, had a turnover of 5.4 compared with 4.2 for open credit appliance stores.

None of the appliance stores reporting in the survey sold only refrigerators, but 57 concerns indicated that refrigerators were their major line. Of these 57 firms, 72% had a profitable operation in 1939.

This was the highest percentage of profitable operation of the seven different types of major lines reported.

For those stores whose major line was refrigerators, typical net sales for the year were \$34,700. Cost of goods sold averaged 66.3%, total expense was 30.3%, profit was 3.4%, realized markup 50.9%, and inventory turnover was 6.2 times a year.

#### HOUSE FURNISHINGS STORES

A total of 92 house furnishings stores reported their operating figures for 1939 to Dun & Bradstreet. Major items sold by these concerns include electrical appliances, furniture, floor coverings, lamps, bedding, blankets, and window coverings.

Of the total, 72% made a profit during the year. Typical net sales per store were \$24,700. Cost of goods sold for profitable concerns was 60%, compared with 60.6% for all house furnishings stores. Greater difference is shown in total expense, profitable concerns showing 35.4%, with the average for all concerns being 37.2%.

#### REALIZED MARKUP

Realized markup for profitable stores was 66.8%, while that for all stores was 65.1%. Profitable concerns had an inventory turnover of 2.9 times a year, compared with 2.8 for all stores.

Survey of credit policies reveals that 25% of the reporting stores operate on a cash basis, 61% on open credit, and 39% on instalment credit.

Cash concerns reported 99% of their sales were for cash; open credit stores had 50% on open credit, while instalment selling stores had 70% of their sales on terms.

## Electric & Gas Appliance Stores

Table 1—Operating & Merchandising Ratios

Profit and Loss Statement: (In Percentage of Net Sales)	All Concerns		Un- Profitable Concerns		Range of Usual Profitable Experience	
	Concerns	Concerns	Concerns	Concerns	Lower Limit	Upper Limit
1. Net Sales	100.0	100.0	100.0	100.0	....	....
2. Cost of Goods Sold	64.7	62.6	68.1	68.1	....	....
3. Total Expense	32.8	30.4	37.4	37.4	23.2	36.6
a. Salaries, Owners, Officers	10.1	9.5	10.5	10.5	6.5	13.5
b. Wages, Other Employees	10.7	9.7	13.0	13.0	5.9	13.1
c. Occupancy Expense (83% of concerns renting)	3.5	3.1	4.0	4.0	1.8	4.2
d. Advertising	1.5	1.2	1.6	1.6	0.7	2.3
e. Bad Debt Losses	0.5	0.5	0.6	0.6	0.2	1.1
f. All Other Expense	6.5	6.4	7.7	7.7	1.9	8.6
4. Profit or Loss. (L) Loss	2.5	7.0	5.5(L)	5.5(L)	2.9	12.0
Merchandise Ratios:						
5. Gross Margin (% of Sales)	35.3	37.4	31.9	31.9	31.8	46.4
6. Realized Mark-up (% of Cost)	54.6	59.8	46.9	46.9	46.7	86.7
7. Inventory Turnover (Times per Year)	4.6	4.9	4.3	4.3	3.0	7.1

Table 2—Credit and Operating Ratios

Profit and Loss Statement: (In Percentages of Net Sales)	Instalment Sales 50% or More		Open Credit— 50% or More Sales		Un- Profitable Concerns	
	All Concerns	Concerns	All Concerns	Concerns	Concerns	Concerns
No. of Concerns	173	113	60	75	37	38
1. Net Sales	100.0	100.0	100.0	100.0	100.0	100.0
Typical (Median) per Store	\$29,800	....	....	\$26,300	....	....
2. Cost of Goods Sold	66.0	63.8	70.0	60.6	56.6	64.9
3. Total Expense	31.6	28.8	35.6	39.4	38.1	40.5
a. Salaries, Owners and Officers	8.5	8.0	9.2	10.8	12.3	10.2
b. Wages, All Other Employees	10.7	9.8	11.5	15.4	13.3	16.1
c. Occupancy Expense	3.4	2.8	4.2	3.2	3.6	3.0
d. Advertising	1.7	1.6	1.7	1.1	1.0	1.3
e. Bad Debt Losses	0.6	0.6	0.7	0.4	0.4	0.4
f. All Other Expense	6.7	6.0	8.3	8.5	7.5	9.5
4. Profit or Loss. (L) Loss	2.4	7.4	5.6(L)	0.0	5.3	5.4(L)
Profitable Concerns (% of Total)	65.0	....	....	49.0	....	....
Merchandise Ratios:						
5. Gross Margin (% of Sales)	34.0	36.2	30.0	39.4	43.4	35.1
6. Realized Mark-up (% of Cost)	51.6	56.8	42.9	65.1	76.8	54.2
7. Inventory Turn- over (Times per year)	5.4	5.6	5.0	4.2	4.6	3.6
% Renting	89.0	87.0	92.0	80.0	82.0	78.0

Table 3—Merchandise and Operating Ratios

Profit and Loss Statement: (In Percentages of Net Sales)	Major Lines					
	Refrigerators	Radios	Appliances	Supplies	Stoves	Washing Machines
No. of Concerns	57	49	73	56	14	16
1. Net Sales	100.0	100.0	100.0	100.0	100.0	100.0
Typical (Median) per store	\$34,700	\$17,000	\$28,600	\$21,100	\$17,800	\$21,000
2. Cost of Goods Sold	66.3	61.7	65.6	59.8	68.8	65.8
3. Total Expense	30.3	35.4	33.2	36.2	31.2	32.0
a. Salaries, Owners and Officers	8.4	11.7	8.5	12.3	11.5	9.2
b. Wages, All Other Employees	9.3	9.9	12.0	11.7	7.6	10.9
c. Occupancy Expense	2.7	5.0	3.6	4.0	3.4	2.9
d. Advertising	1.1	2.4	1.7	1.1	1.5	0.9
e. Bad Debt Losses	0.3	0.6	0.6	0.6	0.7	0.4
f. All Other Expense	8.5	5.8	6.8	6.5	6.5	7.7
4. Profit or Loss. (L) Loss	3.4	2.9	1.2	4.0	0.0	2.2
Profitable Concerns (% of Total)	72.0	61.0	56.0	66.0	50.0	69.0
Merchandise Ratios:						
5. Gross Margin (% of Sales)	33.7	38.3	34.4	40.2	31.2	34.2
6. Realized Mark-up (% of Cost)	50.9	62.2	52.5	67.3	45.4	52.0
7. Inventory Turnover (Times per Year)	6.2	4.1	4.3	3.3	7.8	4.3
Per Cent of Concerns Renting	88.0	86.0	85.0	78.0	69.0	86.0

## House Furnishings Stores

Table 4—Operating & Merchandising Ratios

Profit and Loss Statement: (In Percentages of Net Sales)	All Concerns		Un- Profitable Concerns		Range of Usual Profitable Experience	
	Concerns	Concerns	Concerns	Concerns	Lower Limit	Upper Limit
1. Net Sales	100.0	100.0	100.0	100.0	....	....
2. Cost of Goods Sold	60.6	60.0	66.0	66.0	....	....
3. Total Expense	37.2	35.4	40.6	40.6	30.0	40.5
a. Salaries, Owners, Officers	12.5	11.2	14.0	14.0	7.9	15.9
b. Wages, Other Employees	11.3	10.9	11.3	11.3	6.2	16.3
c. Occupancy Expense (85% of concerns renting)	5.2	5.0	7.2	7.2	2.2	7.6
d. Advertising	1.0	1.0	1.0	1.0	0.5	1.7
e. Bad Debt Losses	0.7	0.6	0.7	0.7	0.4	1.4
f. All Other Expense	6.5	6.7	6.4	6.4	3.5	8.8
4. Profit or Loss. (L) Loss	2.2	4.6	6.6(L)	6.6(L)	1.7	8.0
Merchandise Ratios:						
5. Gross Margin (% of Sales)	39.4	40.0	34.0	34.0	36.5	58.8
6. Realized Mark-up (% of Cost)	65.1	66.8	51.6	51.6	57.6	143.0
7. Inventory Turnover (Times per Year)	2.8	2.9	2.6	2.6	2.2	5.1

## THE NATIONALLY ACCEPTED



### TRADE-IN MANUAL

## THE NEW 1941 NATIONAL REFRIGERATOR MARKET REPORT

1 It lists and illustrates over 2,000 models of domestic type refrigerators so that they may be readily identified by customer and dealer. Thus all guesswork as to age or model is eliminated.

2 It gives a fair, conservative value to each model listed, and thus eliminates the danger of excessive allowances.

3 Its neat and complete make-up impresses the customer—and in general its appearance and lists serves as an effective antidote for the customer's inflated sense of value of his "trade-in." SEEING IS BELIEVING!

4 Its trade-in appraisal values are designed to let the dealer MAKE A PROFIT on his replacement sales.

5 Its complete editorial section tells the dealer how to trade profitably, how to resell the refrigerator traded—HOW TO RECONDITION A REFRIGERATOR.

List Price: \$3.50

You may have this

handy trade-in blue

book for \$1.50 with

your subscription to

the NEWS

Business News Publishing Co.  
5229 Cass Ave., Detroit, Mich.

☐ Air Conditioning & Refrigeration News  
1 year subscription plus Market Report.  
☐ Renewal. ☐ New.  
☐ \$5.50 enclosed. ☐ Send book C.O.D., I'll  
pay postman \$5.50.

Name .....

Address .....

City..... State.....

**ORDER NOW** →  
**SAVE \$2.00**

**BUSINESS NEWS PUBLISHING CO.**  
5229 CASS AVE., DETROIT, MICH.



## Leading Carrier Dealers Receive Awards At National Convention

(Concluded from Page 1)

attending the meetings how a large organization functions in relation to its organization in the field.

Welcomed at Syracuse by E. T. Murphy, Carrier vice president, dealers were told of the manufacturing facilities available for building the "Carriertron" by C. A. Ostling, who is in charge of production. Progress of the "new product" was traced through the organization from its original conception to the time when it is ready for sale, by a series of one-act skits.

Dealers were given a view of a laboratory conference, in which Donald French and his associates discussed the development work necessary on a new product. At another stage presentation, F. D. Hubbard told how purchasing of materials is done for the 1,294 Carrier products. P. V. Osborn, described the process in which work is allocated to manufacturing departments, and John Holton told of the many activities of the inspection department.

Following the "factory story" of a Carrier product, J. M. Bickel, dealer relations counsel, introduced dealers who received "gifts of recognition" for their outstanding work during the past year. The "outstanding dealer of 1940" award was given to Vernon A. Kelly, Florida Weather-makers, Jacksonville, Fla. Beginning business in May of 1938, "short on capital but long on faith," Mr. Kelly's company now ranks second in the Carrier dealer organization.

For being an accredited engineer, a master salesman, and a keen business woman, Henriette Betlem, Betlem Heating Co., Rochester, N. Y. received an award. Miss Betlem was also voted "best looking Carrier dealer of 1940."

Recognition was given Jesse W. Page, Page-Williamson Co., Charlotte, N. C. for outstanding work in the sale of packaged air conditioning. Leadership in residential equipment went to another North Carolina dealer—C. C. Donovan of Carolina Air Conditioning Co., Winston-Salem.

An award was presented to E. A. (Ed) Lutz, Lutz Engineering Co., Providence, R. I., for a 400% increase in commercial refrigeration sales. George Pierce, Boston Filter Co.,

Boston, was selected for his work in the sale and leasing of water coolers.

Heading the hardest hitting group of room cooler salesmen in the Carrier organization, F. C. Garrett, Quinn Engineering Co., New York City, attained distinction in this classification. In cooperation with Al Edwards, head of the firm, Mr. Garrett operates 14 salesmen, 12 of whom have been with the organization at least two years.

For a "well balanced job in all departments," Dan Willis of the Dan H. Willis Co., Akron, Ohio, was given an award. Leadership in the field of unit heaters went to Abry S. Cahn, Cahn Electric Co., Shreveport, La.; and John C. Zeman, Standard Distributing Co., Milwaukee, was selected as "pioneer dealer."

Promotion and sale of room ventilators found Gordon Thomas, Air Comfort Corp., Chicago, leading the pack. William E. (Bill) Morgan, Lewis Morgan & Son, Salisbury, Md., a dealer established during 1940 was given recognition for "a good job—well diversified" during the year.

Speaking for the Carrier dealer group on what the dealer expects from his manufacturer, T. R. Walker, Columbus Heating & Ventilating Corp., Columbus, Ohio, declared that "our first demand of Carrier is that the company keep up with the times." Using developments in the plastics industry as an example, he asked for new equipment, new ratings, new uses for old equipment, and new applications of all kinds.

The second demand of Mr. Walker was "integrity." Citing the development of the Carrier engineering data book from a few pages some 10 years ago to its present size, Mr. Walker congratulated the company on the accuracy of ratings in this book. Stating that in his long experience in the industry "the claims or ratings made were never seriously questioned," Mr. Walker pointed out that "in the press of competition it is not possible to have large safety factors to protect these ratings."

Finally, Mr. Walker asked that his company have "balance." This he defined as a financially sound business operated on the principle of the golden rule—with relation to dealers and to the public.

## \$200 Window Model Leads Carrier Room Conditioner Line

SYRACUSE, N. Y.—Anticipating the greatest demand for packaged air conditioning in industry history, Carrier Corp. has announced a new line of room coolers, including a ½-ton window-type model built to retail for less than \$200. An innovation in the company's line, the new conditioner has a capacity of 5,700 B.t.u. per hour, and provides all the functions of summer air conditioning.

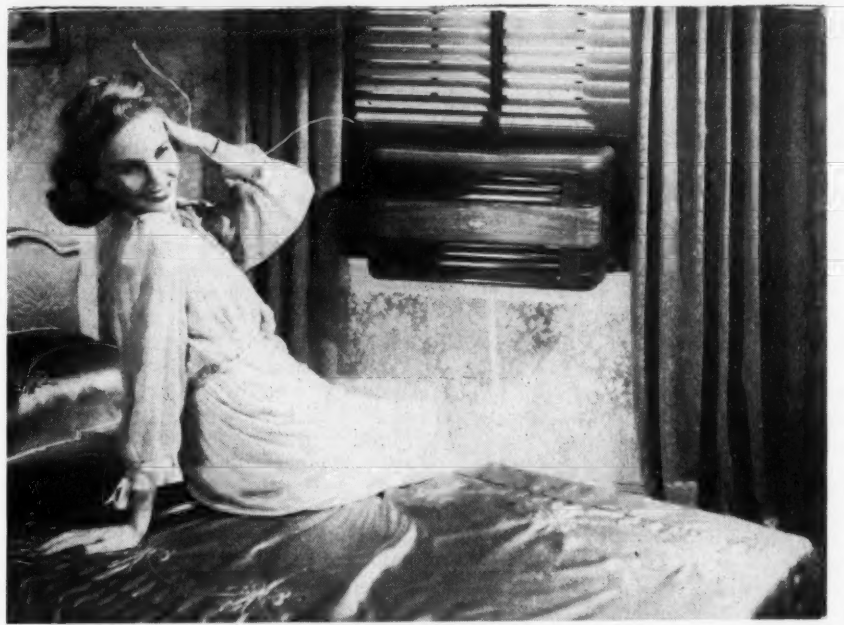
Three other models include the 7,500 B.t.u. "Junior Weathermaker" to sell for approximately \$300; the 9,300 B.t.u. deluxe unit to retail around \$400, and an 18,000 B.t.u. unit for large rooms in hot climates. All floor models have wood cabinets designed by Lurelle Guild, industrial designer, two-stage refrigerant sub-cooling, and adjustable air outlets.

The compact window type model supplies the desired proportion of fresh air and also exhausts smoke-laden air from the room where it is installed. Sliding metal panels at each end provide a simple, but effective means for regulating the correct proportions of fresh, exhaust, and recirculated air quantities.

Air capacity is 230 c.f.m., handled by a plastic blade fan powered by a ½-hp. motor. Use of a non-metallic material is said to reduce air noise. The condenser fan handles 440 c.f.m., of which 250 c.f.m. may be exhaust air drawn from the room.

All models in the 1941 line are

## Fair Weather For a Fair Lady



Carrier ½-ton window model for summer air conditioning.

equipped with "edge-seal" throw-away filters, constructed of six layers of a plastic material coated with a viscous material.

Refrigerant sub-cooling is provided by a seamless copper coil immersed in the evaporator condensate which collects in the drip pan. This moisture is then completely evaporated on the condenser coil and discharged outdoors, giving the effect of an evaporative condenser.

The three larger models are mounted on casters, ready for installation before any standard window. After the unit is rolled into place

and adjusted for height, the walnut cabinet is simply slipped over it. A special wood base is provided, grooved in increments of 1 inch. Thus the base may be raised or lowered by adding sections or cutting the base off on any of the grooves.

If the floor-type units are installed in front of a radiator, under a window, the conditioner may be used in winter as a capacity booster for this radiator—in addition to ventilation.

All models are equipped with a 3-way switch; for cooling, for ventilation only, and an "off" position.



## THE INSIDE TELLS ANOTHER STORY

Discovery, development, evolution... in the domestic refrigeration industry these steps to perfection have been big and dramatic. The gleaming, efficient home refrigerator of 1941 is a very distant cousin of the homely electric "ice-box" of a decade ago.

But when you look inside today's refrigerator, when you look into the cooling unit, you most often discover a curious thing. The refrigerant is quite likely to be Sulphur Dioxide—the same refrigerant that has been cooling home refrigerators since the industry was born.

Why? Because Sulphur Dioxide is still the best refrigerant yet developed for household use.

SO<sub>2</sub> won't burn, it won't explode. (In fact, it has fire-extinguishing properties.) SO<sub>2</sub> lends itself to perfect lubrication. It is safe, because its pungent odor serves as its own unmistakable warning agent. And this very odor makes possible leak detection a simple service operation.

Ansul, as pioneers in the production of Sulphur Dioxide, offers you a gas that is clean, pure, and dry. Every cylinder bears a laboratory-analysis tag attesting to this fact.

Throughout the nation, Ansul Jobbers with complete stocks are ready to serve you better with Ansul SO<sub>2</sub>. If you do not know the Ansul Jobber in your region, write and let us tell you.



**Sulphur Dioxide**

**by ANSUL**

ANSUL CHEMICAL COMPANY • MARINETTE, WIS.  
ANSUL METHYL CHLORIDE • ANSUL ICE-X • AGENTS FOR KINETIC'S "FREON-12"

THERE IS AN ANSUL JOBBER NEAR YOU READY TO SERVE YOU BETTER

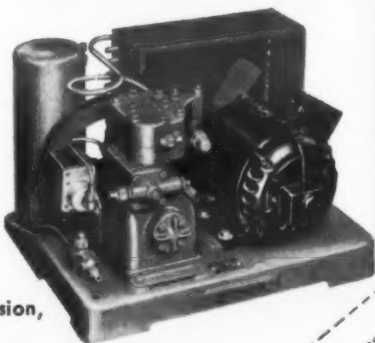


## More Chances to Make Money with KELVINATOR'S Complete Line!

Kelvinator now offers you a complete line of quality refrigeration supplies and condensing units—priced right to help you do an increased business at a good profit. In addition, prompt deliveries are made possible by Kelvinator's nationwide system of strategically located stocks.

You'll be money ahead by getting set now to take advantage of opportunities for service and equipment sales with Kelvinator. Just use the coupon.

Kelvinator Commercial, Parts & Service Division,  
Nash-Kelvinator Corp., Detroit, Mich.



**Get More—  
Get KELVINATOR**

Please send me complete information on Kelvinator  
☐ Parts and Supplies ☐ Kelvinator Commercial  
Equipment.  
Name \_\_\_\_\_ Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ K-104



## What's New

Descriptions of some of the brand new items for the refrigeration and air conditioning, and major appliance fields.

### New Tumbler Drier For 7-Pound Load

CHICAGO—The Hotpoint home laundry division has announced a new tumbler clothes drier, which can be installed on any 110-volt house circuit, as a companion to the tumbler drier introduced last year, in which 7 lbs. of clothes can be dried.

In the new model, air is heated by a 1,400-watt unit. Because of its smaller size and lower wattage, the new drier is expected to expand the field of use for this type of equipment. No special wiring is required.

### Accessory Cabinet Sets on Refrigerator's Top

BRIDGEPORT, Conn.—One of several new cabinet sections introduced by General Electric Co. is a refrigerator accessory cabinet which can be sold with or as an accessory to any of the 6-cu. ft. refrigerator models.

It provides storage facilities for the small kitchen where space is at a premium. Styled to match the

refrigerator, with split shelf flexibility, the new all-steel cabinet is so designed as to fit tightly and securely on top of all G-E "sixes" of the 1937-8-9-40-41 refrigerator lines.

Its overall dimensions are 24 inches in height, 30 inches in width, and 21 inches in depth. The cabinet requires 22 inches clearance above the refrigerator itself, and its interior makes available 6 cu. ft. of storage for such things as packaged foods, club soda, mixing bowls, gallon jugs, cans, and small appliances.

No anchorings or tie bolts are needed to hold the cabinet in place. Split wire shelves are included.

The cabinet line has been augmented with an 18-inch vegetable cabinet, a 9-inch towel dryer cabinet, and a matching 9-inch vertical tray storage cabinet.

### Prices Reduced on Calrod Replacements

CHICAGO—A sharp reduction in cost, and several design refinements in Calrod replacement units are the outstanding factors in the Hotpoint Co.'s 1941 electric range replacement unit plan, just announced by D. C. Marble, manager, Hotpoint Product Service Division.

Although the program has been operating less than one year, increased volume and improved Calrod manufacturing facilities make it possible to reduce the prices of 1941 Calrod reconditioning units from \$7 to \$5.95 for the utility size, and from \$9 to \$7.95 for the giant size units. These are believed to be the lowest list prices for any enclosed-type replacement units.

The 1941 Calrod replacement units incorporate several improvements over older types. Due to widening and lengthening of the three notched spacers used to locate replacement units in the cooking top opening, the 1941 units fit more firmly into the cooking top. Connection of ground wire to the replacement unit has been greatly simplified.

New terminal blocks on the units are beveled on the bottom to give greater clearance, and insure easy removal of the drip tray, regardless of the make of old electric range on which the unit is used.

In 1941 units the Calrod coils have been raised about  $\frac{3}{32}$  of an inch higher above the cooking top, and the opening in the aluminum reflector pan has been increased to 2 inches in diameter.

Two new adapter rings have been added to the Calrod replacement unit stock, making a total of nine adapter rings and two heating unit assemblies (one giant and one utility size). With this comparatively low replacement inventory, retailers can fit practically any make of old electric range with new, modern Calrod units.

Any service man can carry two Calrod heating unit assemblies, and nine adapter rings, and be in a position to service most any electric range he may encounter, without returning to headquarters for needed material.

tains a screw for leveling the scales parallel to the drafting surface.

An outstanding feature of this new drafting machine is its protractor device. The stainless steel protractor plate is graduated in 2° readings, and can be set accurately for  $\frac{1}{2}$ ° readings by use of the graduated vernier. All graduations are machine cut. The protractor can be locked at any degree, but for speed and convenience it is fitted with a latching spring to lock the scales at 0, 30, 45, 60, and 90° on either side of the 0° reading.

### Westinghouse Announces 2 Water Heater Lines

MANSFIELD, Ohio—Two 1941 lines of electric water heaters, with double action automatic thermostatic controls, have been announced by the Westinghouse merchandising division. Price ranges on both lines have been reduced.

The Olympian line of square, round, and table-top models incorporate a handy cleanout opening for easy removal of sediment and lime deposits where there are difficult water conditions. All Olympian models are equipped with copper hot water lines.

Thermostats have a double snap-acting structure to operate switching contacts. Square cabinet models



come in 30, 40, and 52-gallon capacities. Table-top units have 15 and 30-gallon tanks, and the round models 30, 40, 52, 66, 80, and 120-gallon capacities.

The Special line, round models with capacities of 10, 30, and 52 gallons and a table-top 30-gallon model, has standard Westinghouse thermostatic controls, Corox economizer heating units, Palco Wool insulation, and a cold water baffle which prevents temperature drops from incoming water. These heaters are finished with high temperature Dulux baked on bonderized steel.

In conjunction with a new selling and advertising program to develop water heater sales prospects, Westinghouse distributors are furnishing dealers with an X-Ray Visualizer sales presentation, enabling the prospect to see what is inside the heaters. Sales literature, display aids, and a full explanation of the new Westinghouse "informative label" accompany it.

### Orange Juice Dispenser Has Agitator Pump

PLACENTIA, Calif.—Development of a refrigerated automatic orange juice dispenser has been announced by Citrus Sales, Inc., a cooperative group of citrus growers with offices here.

The device consists of a 10-gallon stainless steel tank refrigerated by a  $\frac{1}{4}$ -hp. condensing unit, set to keep the fruit juice at 33° to 35° F. Juice in the tank is kept in constant circulation by means of an egg-beater type device driven by a  $\frac{1}{4}$ -hp. motor.

Combined effect of the refrigeration and the agitation prevents the



juice from separating and keeps it in a fresh condition for as long as 10 days, according to Robert Dowling, manager of Citrus Sales.

The dispensers, now being distributed in limited numbers in this area, are equipped with coin and metering equipment, of the type familiar to coin-operated dispensing units.

Under the present tentative arrangement, the dispensers are set to meter out a 6-ounce drink for 5 cents.

The juice is extracted in a central plant, where mass-production methods keep costs low, and is stored in the central plant in a large refrigerated tank equipped with agitators. Distribution is by fast truck.

The dispensers are expected to find their best market in large population centers, where the juice can be extracted in a central plant. In smaller cities, the owner or lessor of the equipment will have to do his own extracting.

### Bush Catalog Gives Data For 'Plasti-Cooler'

HARTFORD, Conn.—Featured in Bush Mfg. Co.'s new catalog is the "Plasti-Cooler," claimed to be the first application of plastics to the low side field. Information on dimensions and surface and a guide to applications on this model are contained in the product section.

Two other major sections of the catalog cover applications and engineering. Engineering data, charts, and drawings are used throughout.

## EASY BENDING

You get it in WOLVERINE TUBING

—Buy From Your Jobber—

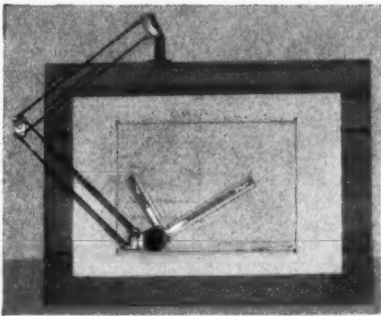


WOLVERINE TUBE CO. DETROIT

### Machine Lightens Task Of Draftsman

COCHRANTON, Pa.—A new, light weight, low priced drafting machine designated as "Master-Drafto" model No. 60 has been announced by the Drafto Co. here.

Arms of this unit are constructed of seamless steel tubing, fitted with solid bearings. Scale blades are designed so that any scale, either boxwood or aluminum, can be inserted. Scales fit tightly into the



blades without deviating from the necessary 90° angle, it is claimed.

For center mounting on a drafting board or table, a cast aluminum bracket is used. This bracket con-

IT'S *Good Business*  
to use  
DAVISON'S  
**SILICA GEL**



as Your Standard Drying Agent

Yes—it's good business because the use of Silica Gel assures satisfied customers. And satisfied customers are an asset in any business. The fact that Silica Gel's superior qualities are acclaimed by thousands of "quality-wise" service engineers and manufacturers of well known refrigeration equipment is evidence that Silica Gel can play an important part in increasing your business and profits.

Standardize on dryers that contain Silica Gel and forget about freeze-ups and customer complaints resulting from moisture. You can obtain your favorite dryer charged with Silica Gel or Silica Gel for refill from your jobber.

### Silica Gel Gives You These 4 BIG ADVANTAGES

1. HAS  $1\frac{1}{2}$  TO 2 TIMES MORE CAPACITY
2. ACTS INSTANTLY, PERMANENTLY
3. REMOVES CORROSIVE ACIDS
4. DOES NOT CAKE OR POWDER

For complete information see your jobber or write to

**THE DAVISON CHEMICAL CORPORATION**

Silica Gel Department

BALTIMORE, MARYLAND

HUSSEY PURE LAKE COPPER • HUSSEY PURE LAKE COPPER • HUSSEY



HIGH VELOCITY SYSTEMS

Speeded up  
WITH

**HUSSEY  
PURE LAKE  
COPPER**

The easy workability and forming qualities of Hussey Pure Lake Copper will speed up your High Velocity System installations. Hussey Copper is quickly obtainable, too, through conveniently located warehouses. Dial your Hussey warehouse for fast service.

**HUSSEY**

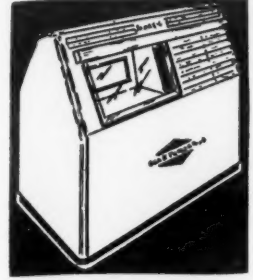
C. G. HUSSEY & COMPANY

(Division of Copper Range Company)  
Rolling Mills and General Offices: PITTSBURGH, PA.

Warehouses in Principal Cities



CASH-IN with



REOL

QUICK  
FROZEN  
FOOD  
DISPLAYERSWrite for ex-  
clusive Dis-  
tributor-Deal-  
er proposition.THE REOL COMPANY  
Hearst Tower Bldg. Baltimore, Md.

CUSTOMERS

Want it...

DEALERS

Wanted!

The market for "pack-  
aged" air conditioning  
is almost unlimited.  
But no sale is better than the unit  
you sell! It will pay you to investi-  
gate the GR-Lipman line. We have  
a liberal sales franchise... and  
equipment that is unex-  
celled. Write for details.

GENERAL REFRIGERATION DIVISION  
Yates-American Machine Co.  
Dept. AG-2, Beloit, WisconsinFROM  
1/4 to 25 TONS  
OF REFRIGERATION

Brunner Refrigerating and Air Condition-  
ing equipment comprises air and water  
cooled condensing units for practically  
all types of commercial applications up  
to and including 25 tons of refrigeration.  
Catalog promptly on request. Brunner  
Manufacturing Co., Utica, N. Y., U. S. A.

BRUNNER

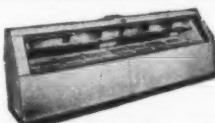
FOR YEARS THE SYMBOL OF QUALITY

SPECIFY  
Virginia  
REFRIGERANTSVIRGINIA  
SMELTING CO.  
Located at tidewater  
WEST NORFOLK, VA.Looking for a  
TRAINED MAN?

Call on the U.E.I.  
Placement Bureau for  
a trained, reliable,  
competent worker. For  
over 14 years U.E.I.  
trained men have been  
making good employees  
for all positions re-  
quiring technical  
knowledge or mechan-  
ical ability. Remem-  
ber, the U.E.I. Place-  
ment Bureau Service  
is FREE to you and  
your prospective em-  
ployee. Try it.

UTILITIES ENGINEERING INSTITUTE  
Belden & Wayne Aves. (Est. 1927) Chicago, Illinois

KERO TEST

Valves and Fittings  
The Standard of the  
IndustryKerotest Manufacturing Co.  
Pittsburgh, Pa.Dealers  
Wanted for  
Midwestern  
and Southern  
StatesCAMPBELL REFRIGERATOR CO.  
Milwaukee, Wis.

## The Service Man's Notebook

By Henry Kronke

Mr. Kronke, a service engineer in New York City, compiles useful,  
handy data for use in his work as he finds a repeated need for certain kinds  
of information. The editors suggest that service and installation engineer  
readers of the NEWS cut these tables out for their own notebooks.

## Food Characteristics Important In Storage (Part 1)

Product	% Water	Spec. Heat	Average Freezing Temp.	Storage			Respirat'n B.t.u./Lb./Day
				Temp.	R.H. %	Storage Life	
Apples.....	84	0.92	28.5°	32°	87	2-8 mos.	0.385
Asparagus.....	93	.92	30.0°	32°	88	3-4 wks.	.....
Bananas.....	75	.90	29.5°	...	...	...	8.64
Beans, Green.....	89	.91	30.0°	35°	88	3-4 wks.	1.353
Beef, Fat.....	51	.60	....	35°	84	.....	.....
Beef, Lean.....	72	.77	....	35°	85	.....	.....
Berries.....	85-90	.90	29.0°	32°	82	7-10 days	1.8
Broccoli.....	90	.93	29.5°	32°	88	10-12 days	.....
Butter.....	10	.64	....	45°	80	.....	.....
Butter.....	..	...	....	0°	80	3-4 mos.	.....
Cabbage.....	92	.93	31.5°	32°	90	3-4 mos.	.....
Cantaloupe.....	81	.92	....	34°	80	.....	.....
Carrots.....	88	.87	29.5°	32°	97	2-4 mos.	0.704
Celery.....	94	.95	30.0°	32°	97	2-4 mos.	1.303
Cheese.....	35	.64	8-17°	35°	80	.....	.....
Cherries.....	83	.85	26.0°	32°	82	10-14 days	0.77
Cider.....	..	...	....	32°	..	.....	.....
Corn.....	74	...	29.0°	32°	87	3-4 wks.	1.903
Cranberries.....	..	...	....	38°	90	.....	.....
Cream.....	59	.68	....	40°	..	.....	.....
Cream, Long St...	..	...	....	32°	...	.....	.....
Cucumber.....	95	...	30.5°	45°	87	3-4 wks.	.....
Eggs, in Shell.....	73	.76	....	32°	80	9-10 mos.	.....
Eggs, Frozen.....	..	...	....	15°	...	.....	.....
Endive.....	94	.90	31.0°	32°	97	2-3 wks.	.....
Fish, Fresh.....	75	.82	....	28°	80	.....	.....

## Dealers Make Recommendations For Self-Regulation of Instalment Selling

(Concluded from Page 1, Column 2)

Based upon a study extending over the last six months, the report is probably the most thorough survey of instalment selling yet made by a group reflecting the views of both buyer and seller, according to James B. McMahon, Jr., chairman of the conference and executive vice president of the Associated Furniture Dealers of New York. Copies of the report were sent to the governor, legislators, and other public officials interested in economic and social problems, and it was announced that bills based upon the report would be introduced in the state legislature.

In framing its report, the conference held there was reason for deferring consideration of the licensing of instalment business until the business has been given the opportunity of voluntarily regulating itself, aided by sound amendments to existing statutory law. The report, therefore, offered both a voluntary program for establishing the higher standards which will be adhered to by responsible sellers and a compulsory program to "reach those relatively few operators who disregard and ignore any ethical standards."

The report cites records of the Legal Aid Society and the Better Business Bureau, both of New York City, showing that the number of cases involving criticism of instalment selling has steadily diminished since 1933, when the retail trades began to regulate themselves.

As to the need for self-regulation, the report says that responsible merchants realize that freedom from unduly restrictive governmental control necessarily rests largely with themselves. Although the organized retail trades long ago took the initiative in correcting malpractices, they have been handicapped by the activities of others beyond the range of group influences, it declares, adding:

"They feel now, however, that they have found a practical way in which the responsible ones may continue to exercise maximum self-regulation, while the irresponsible ones will be required to conform to minimum law."

Voluntary and legislative recommendations contained in the report included:

The contract should include: "A statement of financial details, showing the exact charges for which the purchaser is obligated. Contracts should contain the actual cash selling price of the article purchased, a statement as to the amount of the down payment or trade-in allowance if any, the amount of each succeeding payment and the due date, and the amount of the carrying charge expressed in dollars, unless the carrying charge is simple interest on the unpaid balances as is true with

a relatively small number of sellers, in which case the rate of interest shall be specifically set forth."

No print type smaller than 8-point in size be used for contract provisions.

Retention of wage assignments so that they may be used by wage earners as a means of securing credit, but the enactment of 12 points regarding such assignments designed to protect buyer and seller.

Confession of judgment made in connection with an instalment sale at the time of the sale shall be made invalid.

No lien on assignment of wages or garnishments shall be made on salaries under \$15 weekly in cities of 250,000 or more and under \$12 in smaller cities and towns.

Education of buyer to rights and responsibilities under contract important.

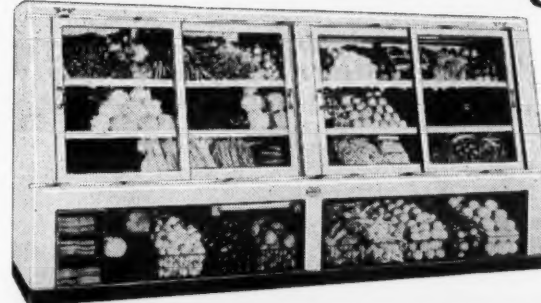
Seller to have no further right to deficiency if the buyer who has paid 80% or more of the purchase price subsequently defaults on the balance, but returns the merchandise or security after default at the seller's request, without putting the seller to the expense of legal proceedings, and the goods are in ordinary condition and free from malicious damage.

Whenever a guarantor signs a document that guarantees payment of an instalment account, such document shall identify specifically the transaction to which it relates or contain a complete description of the merchandise sold or service involved, and a guarantor shall not be obligated beyond the transaction described.

When subsequent purchases are added to an instalment account or contract, the amount of all payments made previous to the "add-on" purchase shall be applied in their entirety to the liquidation of the previous purchase or transaction.

## THE BUYER'S GUIDE

Sherer 1<sup>st</sup> FOR VALUE  
FOR SALES  
FOR PROFIT



• Just as the Vegetaire (exclusive with Sherer) builds profits in the produce department, so will it build sales and profits for you. . . . And the Vegetaire is only one item in a complete line of Sherer refrigerator display and storage equipment! Write for franchise details.

Sherer-Gillett Co., MARSHALL, MICH.

Service  
with a Capital "S"  
FOR REFRIGERATION  
AND AIR CONDITIONING  
PARTS

WRITE FOR LATEST CATALOG ON  
YOUR LETTERHEAD. WHOLESALE ONLY

THE HARRY ALTER CO.

1728 S. MICHIGAN AVENUE, CHICAGO, ILLINOIS  
3 CHICAGO BRANCHES, NORTH, WEST, SOUTHNEW YORK  
PHILADELPHIA  
BRONX  
JAMAICANEWARK  
DETROIT  
CLEVELAND  
ST. LOUISINSURE AGAINST  
BURNED-OUT BEARINGS!

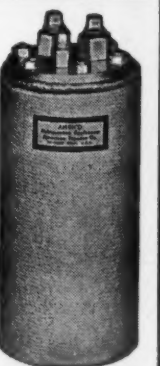
When the lubricating oil, free from hard carbon and wax, is returned to the compressor crankcase, the danger from burned-out bearings is largely eliminated.

An Aminco Oil Separator AUTOMATICALLY separates the oil which becomes mixed with the refrigerant gases and returns it to the crankcase, to do its full duty, that of lubricating compressor bearings.

The electrically welded steel shells of Aminco Oil Separators withstand high pressures without breakage or deformity. Each shell is insulated to avoid condensation and to maintain high pressures.

Sizes range from 1/4 to 120 ton capacity. Send for full information regarding the correct usage of oil separators to save service troubles.

AMERICAN INJECTOR CO.

Pacific Coast—Van D. Clothier, 1015 E. 16th, Los Angeles  
Export: Borg-Warner International Corp.,  
310 S. Michigan Ave., Chicago, Ill.FIELD TESTED  
for TWO YEARS— and still the Sensation  
of the Refrigeration Industry!

RANCO TYPE 91G2





**For Information on Motors**  
FOR ALL TYPES OF  
**Air Conditioning and**  
**Refrigeration Equipment**  
WRITE TO  
**Wagner Electric Corporation**  
4441 PLYMOUTH AVE.  
ST. LOUIS, MO.

**LET US SOLVE YOUR**  
**COIL PROBLEMS**  
**MARLO COIL COMPANY**  
SAINT LOUIS, MISSOURI

**SAF-T-LOC Individual Lockers**  
have the call. Many unusual advantages including the new convertible. Sold only thru distributors of refrigeration and insulation.  
**Get our proposition**  
Master Refrigerated Locker Systems, Inc.  
121 Main St. Sioux City, Iowa

**PENN Leads in**  
**Automatic**  
**Switches and Controls**  
Write for Catalog  
**PENN ELECTRIC SWITCH CO.**  
GOSHEN, INDIANA

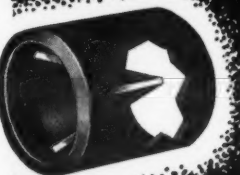
**GALE**  
**CONDENSING**  
**UNITS**  
Precision built for efficient operation.  
**GALE PRODUCTS**  
1635 Monmouth Blvd. Galesburg, Ill.

*You ought to have the new*  
**IMPERIAL**  
**INNER**  
**AND OUTER**  
**REAMER**

A convenient new tool which makes possible a rapid and efficient reaming job on both the inside and the outside edges of copper, brass or aluminum tubing.  
Tubing is introduced from one end of tool for inside reaming, and from the other end for outside reaming. The tool cuts in either direction and is self-centering. It has three hardened, hollow ground tool steel cutters. The cutters are protected against damage when not in use, by outside shell of tool. Body is knurled for easy handling. Handles all sizes of tubing from 3/16" O.D. to 1 1/2" O.D.

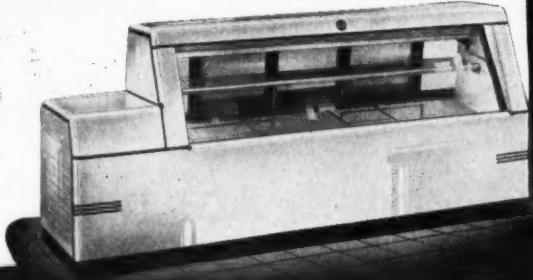
**IMPERIAL BRASS MFG. CO.**  
565 S. Racine Ave., Chicago, Ill.  
**IMPERIAL**  
VALVES • FITTINGS • TOOLS • STRAINERS  
DEHYDRATORS • CHARGING LINES • FLOATS

No. 208-F Inner and Outer Reamer  
Price, each, \$1.20



ORDER FROM  
YOUR JOBBER

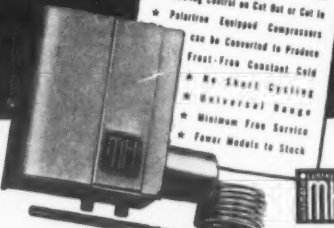
**AMANA**  
**MAKES SENSATIONAL SALES RECORDS!**  
New Amana "Plug In" Case, 6 ft. and 8 ft. sizes. 5-year guaranteed compressor unit. Triple glass front. Hard rubber doors. Front. Cork board and slides. Unmatched insulation. An unmatched value. Write Amana now for facts on COMPLETE line. Desirable territories available to distributors.  
**AMANA SOCIETY**  
Amana, Iowa



*One Instrument* **UNIVERSAL IN APPLICATION**  
FOR PRESSURE CONTROL UP TO 1 H.P.A.C.

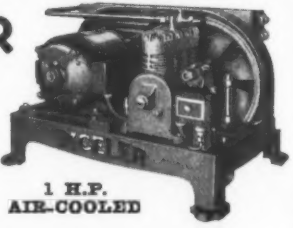
**POLARTRON**

**MINNEAPOLIS-HONEYWELL**  
MINNEAPOLIS-HONEYWELL REFRIGERATION COMPANY  
2307 FOURTH AVENUE SOUTH, MINNEAPOLIS, MINNESOTA  
CAPACITY PLANT (100000) • CONDENSER PLANT (10000) • COMPRESSOR (10000) • EVAPORATOR (10000)

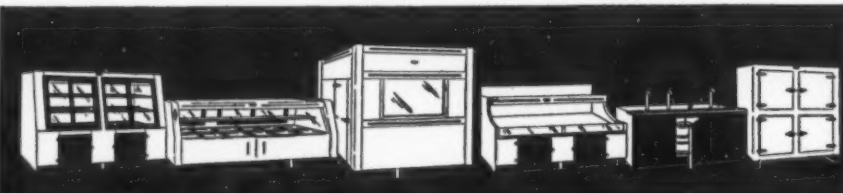


**DICELER 4 CYLINDER**  
**CONDENSING** **4 UNITS**

For Design, Construction and Service the most is offered by DICELER. You'll find it worth your while to get all the facts about DICELER compressors in both air and water cooled models from 1/2 H.P. to 30 H.P. Write for the DICELER catalogue and learn how you can gain greater sales and increased profits.



**THE CONDENSING UNIT LINE WITH EXCLUSIVE FEATURES**  
**DEISSLER MACHINE COMPANY Greenville, Pa.**  
**PIONEER OF FOUR CYLINDER REFRIGERATION**



**"TOPS" IN QUALITY, VARIETY AND PROFIT**  
MAKING MONEY AND FRIENDS FOR HUNDREDS OF DEALERS EVERYWHERE  
A REAL DEALER PROPOSITION . . . INQUIRE TODAY

**FOGEL REFRIGERATOR COMPANY** Since 1899  
16th & Vine Sts., Phila., Pa.

## Defense Contracts— Where Defense Contracts Money Is Being Expended In 18 States

The listings on this page (continued from last week's issue) compiled by Outdoor Advertising, Inc. from U. S. Government reports and local sources, and quoted by Advertising & Selling, present as complete a picture as possible of the allocation of defense expenditures with a

product-place-and-dollar breakdown. The listings will be completed in next week's issue. This data is published because it gives manufacturers, distributors, and dealers an idea of the added market possibilities that the defense program may hold for them in their particular territory.

MICHIGAN	
Battle Creek, ordnance, tractors	\$ 7,393,399
Fort Custer, Battle Creek, construction	8,880,681
Bay City, trailers, harbor tugs	13,375,563
Clinton, cloth	347,000
Coldwater, folding coats	168,500
Dearborn, aircraft, engines	144,288,440
Detroit, trucks, tanks, ordn.	191,154,695
Fort Wayne, Detroit, const.	215,916
Eaton Rapids, blankets, cloth	377,996
Farmington, gauges	123,688
Flint, guns, plant, trucks	29,929,366
Grand Rapids, metal folding chairs	1,023,000
Hillsdale, leggings	422,826
Holland, shoes	169,000
Jackson, wheels, ordnance	2,277,731
Lansing, trucks	531,800
Manistee, assault boats	111,510
Mount Clemens, housing	407,000
Selfridge Field, Mount Clemens, temp. construction	824,629
Muskegon, engines, parts	26,156,442
Muskegon Heights, propellers	113,000
Pontiac, trucks	64,121,619
Port Huron, brass	156,424
Saginaw, trailers, ordnance	21,146,580
St. Joseph, ordnance	1,653,750
Michigan state total	\$515,370,555

MINNESOTA	
Duluth, airport	\$ 513,365
Camp Ripley, Little Falls, construction	620,661
Minneapolis, ordnance, const.	10,131,225
St. Paul, construction	649,432
Fort Snelling, St. Paul, recruit reception	556,717
Winona, leather gloves	110,880
Minnesota state total	\$12,582,290

MISSISSIPPI	
Camp Shelby, Hattiesburg, construction	\$ 9,760,800
Jackson, airport	829,252
Meridian, socks	116,400
Key Field, Meridian, airport	193,586
Pascagoula, cargo boats	44,628,049
Mississippi state total	\$55,526,087

MISSOURI	
Gideon, tent pins	\$ 202,500
Kansas City, clothing, trunk lockers	966,202
Lake City, ordnance, const.	81,075,261
Merberly, construction	129,680
7th Corps Area Training Center, Newberg	8,428,670
No. Kansas City, trailers	1,708,423
Robertson, airplanes	65,952,633
St. Joseph, construction	301,378
St. Louis, shoes	134,815,433
Jefferson Barracks, St. Louis, housing	303,532
Webb City, explosives	514,750
Weldon Springs, ordnance, construction	17,715,000
Missouri state total	\$321,113,462

MONTANA	
Missoula, airport	\$204,229
Montana state total	\$204,229

NEBRASKA	
Lincoln, ordnance	\$ 582,600
Omaha, ordnance	2,955,750
Nebraska state total	\$3,538,350

NEVADA	
Hawthorne, naval air depot	\$2,146,000
Tonopah, construction	184,770
Nevada state total	\$2,330,770

NEW HAMPSHIRE	
Dover, shoes	\$ 291,300
Franklin, socks	179,708
Keene, machines	102,943
Manchester, cloth, airport	824,682
Nashua, cotton sheets, shoes	1,225,321
Portsmouth, submarine	90,205,357
Rocheater, shoes	143,500
Suncook, airplane cloth	136,059
New Hampshire state total	\$3,108,870

NEW JERSEY	
Arlington, ordnance	\$2,058,051
Bayonne, cargo boats, cable	6,962,960
Belleville, water unit	120,835
Bendix, ordnance, aviation equipment	40,260,536
Berkley Heights, ordnance, flares	713,920
Boonton, microphones	290,680
Bridgeton, cotton duck	123,000
Camden, cruisers, destroyers, radios	351,602,852
Cape May, naval air station	150,000
Carlstadt, surgical	106,448
Carneys Point, ordnance	567,950
Clifton, propellers, rafts	64,491,900
Dover, naval depot	219,413
Dunellen, ordnance	146,893
Picatinny Arsenal, Dover, ord.	47,078,992
Elizabeth, machinery, lights	2,161,565
Garfield, cloth	2,956,650
Garwood, radio	236,000
Gibbstown, ordnance	330,000
Harrison, ordnance, tools	6,722,959
Fort Hancock, Highland Beach, construction	1,522,394
Hoboken, instruments, ordn.	1,438,455
Irrington, bridges	544,604
Jersey City, pontoons, overcoats	2,050,176
Kearny, naval and cargo vessels	305,469,928
Kenilworth, explosives	1,398,816
Lakehurst, naval air station	228,700
Newark, ordnance, radio	8,992,713
New Brunswick, surgical dressings	196,386
Parsippany, overcoats, cloth	15,627,066
Patterson, airplane engines, parts	226,889,067
Paulsboro, ordnance depot	145,536
Pedricktown, construction	103,093
Perth Amboy, wire	408,180
Phillipsburg, machinery	1,170,199
Rahway, ordnance	8,510,415
Raritan Arsenal, Raritan, construction	375,282
Red Bank, raincoats, coats	2,920,477
Fort Monmouth, Red Bank, construction	3,652,914
South River, coats	139,300
Trenton, cloth, parachutes	2,170,294
Vineland, shirts	156,807
Wayne, ordnance	121,371
Weehawken, hospital furniture	105,802
West Orange, engine units	159,793
Woodbury, lockers	129,000
Fort Dix, Wrightstown, construction	11,609,255
New Jersey state total	\$1,123,670,494

NEW MEXICO	
Albuquerque, housing	\$285,000
Raton, construction	121,403
Roswell, airport	111,430
New Mexico state total	\$517,833

NEW YORK	
Albany, blankets, housing	\$ 434,800
Auburn, propelling machinery	5,299,890
Bethpage, L. I., airplane, plant loan	51,205,435
Binghamton, trainers	5,592,072
Buffalo, plant, airplanes	159,535,829
Chadwick, sheets	553,661
Cheektowaga, construction	222,855
Cohoes, underwear	929,382
Elmira, ordnance, trucks	3,174,901
Endicott, shoes	1,542,781
Farmingdale, airplanes, engines	63,213,604

Ft. H. G. Wright, Fishers Island, housing	183,000
Frankfort, ordnance	236,242
Garden City, aircraft kits	166,973
Mitchel Field, Garden City, construction, housing	1,015,925
Gloversville, gloves	102,900
Granville, coats	198,000
Hammondsport, aviation equipment	125,738
Hastings on Hudson, cable	310,585
Newburgh, airport	856,045
New Hamburg, sheets	269,228
New York City:	
Brooklyn, ordnance, navy yard, ships	387,114,388
Fort Hamilton, Brooklyn, construction	147,420
Manhattan and Bronx, ordnance, cloth, supplies	178,055,739
Fort Jay, Governors Island, construction	680,019
Queens, cameras, wire, aviation equipment	38,275,986
Fort Tilden, Queens, const.	619,205
Fort Totten, Queens, const.	464,650
Staten Island, naval and cargo ships	92,085,000
Fort Wadsworth, Staten Island, construction	351,930
New Rochelle, surgical	137,728
Fort Slocum, New Rochelle, construction	100,000
Norwich, underwear	148,700
Oneida, surgical instruments	478,950
Fort Ontario, Oswego, const.	461,838
Port Chester, power unit	538,641
Rochester, ordnance, telephones, machinery	40,305,250
Rome, wire	313,308
Schenectady, radio, ordnance	30,759,607
Sidney, air equipment	231,503
Madison Barracks, Stony Point, construction	199,600
Syracuse, comforters, ordnance, plant	20,891,918
Troy, equipment	586,937
Utica, underwear, plant, small arms	47,076,325
Pine Camp, Watertown, const.	5,823,675
Watervliet, ordnance, arsenal construction	14,239,773
Wheatfield Township, plant expansion	1,023,200
Camp Upton, Yaphank, const.	814,072
Yonkers, cable	2,987,210
Fort Niagara, Youngstown, construction	179,000
New York state total	\$1,160,263,018

NORTH CAROLINA	
Charlotte, blankets, municipal airport	\$ 1,049,400
Cramerton, cotton cloth	2,263,949
Elkin, blankets	3,989,250
Ft. Bragg, Fayetteville, const.	17,963,438
Friendship, airport	253,505
Greensboro, working trousers	483,000
Henderson, trucks	2,855,268
High Point, socks	255,750
Kannapolis, sheets	768,870
Spray, sheets, blankets, coats	1,004,410
Thomasville, cotton socks	262,625
Valdese, socks	101,260
West Durham, cotton sheets	811,809
Wilmington, construction	8,612,495
Winston-Salem, Winston-Salem Airport	345,132
Yadkin, cotton sheets	104,565
North Carolina state total	\$40,624,726

NORTH DAKOTA	
Bismarck, Bismarck Airport	\$164,750
North Dakota state total	\$164,750

OHIO	
Akron, tires, rafts, wheels, tracks	\$ 18,113,090
Alliance, steel, electric cranes	589,913
Bryan, hose and valve assemblies	209,197
Bucyrus, cranes	191,610
Canton, loan	379,779
Cincinnati, plant, ordnance, machinery	132,910,555
Cleveland, cars, airplanes, ordnance, lathes	73,482,071
Columbus, plant, ordnance	18,093,098
Fort Hayes, Columbus, const.	120,936
Dayton, ordnance, aviation equipment, radio equipment	27,578,239
Patterson Field, Dayton, construction	2,411,169
Wright Field, Dayton, const.	3,437,688
East Liverpool, chinaware	724,600
Fairfield, air depot	540,000
Falls Junction, ordnance	142,790
Findlay, ordnance	128,384
Gallion, graders	563,289
Greenfield, sleeping bags	330,599
Greenville, mattress covers	100,899
Hamilton, lathes, sub engines	8,606,215
Huron, TNT plant	3,375,000
Marietta, chairs	166,683
Marion, steam shovels	841,066
North Canton, ordnance	3,923,300
Ravenna, ordnance, plant	48,824,640
Reading, ordnance	427,000
Sandusky, machinery, powder plant	11,119,979
Sidney, lathes	119,463
Springfield, ordnance, crates	3,101,740
Tiffin, trailers	234,848
Tippecanoe City, ordnance, signals	2,443,894
Toledo, ordnance	12,138,827
Urbana, aviation equipment	232,530
Warren, ordnance	5,140,800
Wellsville, chinaware	121,479
Youngstown, ordnance, wire	5,478,275
Ohio state total	\$385,843,645

OKLAHOMA	
Bartlesville, fuel, oil	\$ 116,312
Lawton, construction	174,000
Fort Sill, Lawton, construction	3,119,971
Tulsa, airplanes	
National Guard armory	1,988,015
Oklahoma state total	\$5,398,298

OREGON	
Fort Stevens, Astoria, const.	\$ 744,570
Columbia River, construction	118,699
Kenton, tent poles	125,212
Portland, blankets	2,993,746
Salem, blankets	188,250
Tongue Point, construction	198,980
Oregon state total	\$4,369,487

PENNSYLVANIA	
Albion, trailers	\$ 118,426
Allentown, woolen undershirts	102,471
Ambridge, ordnance	1,336,960
Ardmore, trucks, tractors	19,522,141
Ashley, ordnance	1,526,814
Athens, nail drivers	109,950
Bangor, mosquito netting	113,335
Berwick, tanks, pontoons	59,779,130
Bethlehem, ordnance, cable	30,047,406
Bridgeville, steel rods	145,116
Breckenridge, steel	310,916
Butler, trucks, ordnance	4,314,236
Carlisle Barracks, Carlisle, construction	794,650
Carnegie, feather pillows	183,231
Chester, ships	36,983,000
Clifton Heights, cloth	465,000
Coatsville, steel	889,025

Conshohocken, caps	500,308
Danville, materiel	838,274
Darby, mattress covers	102,236
Dunbar, airport	144,888
Easton, ordnance	2,721,240
Economy, cable	155,594
Erie, ordnance, materiel	3,162,354
Essington, generators	366,000
Fleetwood, mattresses	407,940
Greenville, railroad cars	105,188
Hanover, shoes	431,000
Harrisburg, ordnance	3,276,832
Hazleton, shirts	118,349
Indiantown Gap, construction	6,191,225
Irvine, ordnance	2,145,637
Jenkintown, ordnance	2,291,402
Lancaster, ordnance	822,000
Latrobe, blankets	626,763
Lenni, cloth	938,021
McKeesport, ordnance	4,812,950
McSherrystown, shoes	286,800
Middletown, Mifetown Airport	505,000
Milton, tank cars	1,359,280
Monhton, wool socks	532,006
Mohrsville, underwear	122,400
Morton, ordnance	18,617,478
New Castle, pottery	539,025
New Cumberland, temporary housing	347,987
New Kensington, ordnance	1,749,235
Oil City, ordnance	246,282
Perkasie, trousers	137,555
Philadelphia, ordnance, coal, navy yard, engines, plants, ships	686,124,683
Pittsburgh, ordn., const., tools	37,627,073
Pottstown, ordnance	306,146
Reading, ordnance	1,851,



*A Masterpiece for Economy*

## MASTERCRAFT

### ADJUSTABLE PAD AND CARRYING HARNESS



Efficient, sturdy and economical. Provides safer handling and thorough protection of refrigerators. Pad and harness are separate units and both adjustable to practically all styles and sizes of cabinets.

Adjustable Pad \$10.00 each  
Adjustable Harness \$8.50 each f.o.b. Chicago. Letting on pad at only \$1.00 per order extra.

Write for latest folder and prices on pads for refrigerators, washers, ironers, ranges, radios, etc.

**BEARSE MANUFACTURING COMPANY**  
INCORPORATED 1921  
3815-3825 Cortland Street, Chicago, Illinois

Condensing Units for every commercial refrigeration and air conditioning requirement . . . Also packaged air conditioners.

**CURTIS REFRIGERATION**  
Established 1854  
AIR CONDITIONING FOR COMMERCIAL  
**Curtis Refrigerating Machine Co.**  
Division of Curtis Manufacturing Co.  
1912 Kienlen Ave., St. Louis, Mo.

**Dayton**  
V-BELTS

Silent, vibrationless, dependable, long-lasting. Powerful grip prevents slippage. A nearby distributor carries a complete stock for appliances and machines.

**THE DAYTON RUBBER MFG. CO., DAYTON, OHIO**  
World's Largest Manufacturer of V-Belts

**U. S. GOVERNMENT Specification**

**Filtrine**

**Cafeteria Coolers**  
Filtrine Mfg. Co., Brooklyn

**SPORLAN**  
VALVES

**PERFECT LOCATION**



FOR YOUR BUSINESS OR PLEASURE TRIP TO

## ST. LOUIS

Directly opposite beautiful Forest Park . . . convenient transportation to all parts of greater St. Louis . . . Accommodations featuring luxurious comfort at reasonable rates. Fine food.

COOL SPACIOUS ROOMS  
AIR CONDITIONED  
DINING ROOMS  
CROWN COCKTAIL LOUNGE

ROOMS WITH PRIVATE BATH from \$2.  
KINGS HIGHWAY AT W. PINE  
J K BRYAN, MGR

**HOTEL KINGS-WAY**

## Operating and Service Methods For Dry-Expansion Counter Freezers

By Arch Black and Dean C. Seitz

**Editor's Note:** This is one of a series of articles on the servicing of counter-type ice cream freezers, which have been appearing in the issues of AIR CONDITIONING & REFRIGERATION NEWS in the past few months.

It will form one section of a general series on the servicing of low temperature equipment in common use by the retailer.

### General Service on Taylor Freezers

The following only outlines the servicing of the beater and freezer gear units. The beater as used in Taylor freezers is illustrated by Fig. 26 which is driven by what is termed a "safety" stop (Fig. 27). This safety stop is equipped with accurately machined shear pins. The safety stop prevents damage caused by operating the beater after the refrigeration has been left on too long and when mix or water has been frozen solidly to the shell.

The shaft of the safety stop extends through what is termed the "sani-seal ring" (Fig. 27) and a

both screws on the front plate of the freezer and slide the hood back until it is free from the front plate and clips.

The gear unit is belt-driven as has been indicated in previous articles, but certain Taylor freezers—those equipped with multi-speed knobs—have a multi-speed motor pulley. The multi-speed knob and lever raise and lower the beater motor, automatically changing the pitched diameter of the pulley and the beater speed.

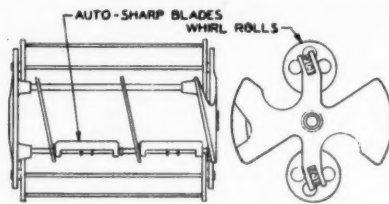
After withdrawing the safety stop the entire gear unit may be removed from the freezer by taking out three bolts holding it to the rear of the shell (Fig. 27). When replacing the gear unit check alignment by rotating the driving socket in various positions and making sure the safety stop can be inserted easily at all points.

Make sure the removable drive shaft and safety stop are pushed back as far as they will go before placing the beater in the freezer.

The beater must engage the safety stop and be back as far as it will go before closing the door. Do not force the beater back with the cover.

For other general service, lubrication, etc., instructions, see previous articles.

Fig. 26—Taylor Beater



bearing at the rear of the shell to the drive socket of the gears. The safety stop is removed by pulling it straight forward out of the freezer.

If the beater does not operate when toggle switch is turned on, check beater motor. If motor is running, check safety stop, belt, and pulleys. If safety stop turns beater when belt and gears are running, shear pins are broken and must be replaced. If motor is not running, check for burned out fuse, open line, switch, etc.

#### GEAR UNITS

The freezer gear unit and motor are covered by a stainless steel hood. To remove this hood take out

### Klinger Heads Phila. Servicemen's Group

PHILADELPHIA—Harry Klinger, sales manager of Kramer Trenton Co., was elected president of the Electric Refrigeration Association of Philadelphia, independent servicemen's organization, for 1941, at the annual banquet Feb. 20.

George Blessing was elected vice president, Simon Goodman, treasurer, and Harold L. Ahn, secretary. With the exception of Mr. Klinger, all officers are active independent servicemen.

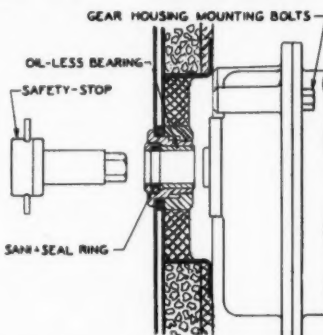
### Dallas Service Engineers Hear Talk on Seals

DALLAS, Tex.—Beckett Electric Co., Electromotive Corp., and Refrigeration Supply Co., of Dallas, were sponsors of a general meeting of refrigeration service engineers held in offices of Mayhew Machine Co. of Dallas, at which Al Wittling, service engineer for Rotary Seal Co., discussed the subject of seals in operation of refrigeration equipment.

### Control Engineering Named Anemostat Representative

KANSAS CITY, Mo. — Control Engineering Co. has been appointed representative for Anemostat in the Kansas City area. A. F. Erickson heads the organization, which handles sales and service on four major lines of air conditioning controls. Control Engineering succeeds the Leffel Co. as representative of Anemostat in this area.

Fig. 27—'Sani-Seal'



Safety stop which prevents damage resulting from operating beater at wrong time.

## CLASSIFIED ADVERTISING

RATES: Fifty words or less in 6-point light-face type only, one insertion, \$2.00, additional words, four cents each. Three consecutive insertions, \$5.00, additional words ten cents each.

PAYMENT in advance is required for advertising in this column.

REPLIES to advertisements with Box No. should be addressed to Air Conditioning & Refrigeration News, 5229 Cass Ave., Detroit, Mich.

#### POSITIONS AVAILABLE

SALES representatives and manufacturers agents handling kindred lines, calling on refrigeration dealers and manufacturers who wish to add a line of automatic carbonators on a straight commission basis. An opportunity to make your calls more productive. Give details as to territory covered and products handled in first letter. Write Box 1315, Air Conditioning & Refrigeration News.

#### BUSINESS OPPORTUNITIES

FOR SALE—Jobbing business established with own building and living quarters. Also extra rental. Only small overhead and low inventory necessary. Reason ill health. Do not answer unless prepared financially. Box 1286, Air Conditioning & Refrigeration News.

SICKNESS compels sale of large clientele, long established refrigeration business. One of the best equipped shops in Southern California. 3 service men. Has income not dependent upon refrigeration service. Business all clear. Can also sell home close to business. Well worth investigating. Box 1313, Air Conditioning & Refrigeration News.

#### EQUIPMENT FOR SALE

BRAND NEW General Electric and Ranco cold controls, one button type replaceable for all makes of refrigerators, both types have 33" tube length, set for 15 to 28 degrees A. C. 110-220 volts cap. UP 1/4 H. P. model on GE, GR-23. Ranco type RJ, price each \$2.50, in lots 6—\$2.25 in lots 12—\$2.00. Fully guaranteed, sample submitted on request, C.O.D., or sight draft bill of lading. R & R REFRIGERATION EQUIPMENT CO., 508 Morris Ave., Bronx, N. Y.

#### REPAIR SERVICE

HERMETIC REBUILDING and Exchange Service General Electric—Westinghouse—Majestic and Grunow Units, Compressors and parts. Immediate shipment. Old unit can be returned later in our crate. We also exchange floats, Evaporators, Controls. Write for price list specify S6.

SERVICE PARTS CO., 1101-03 N. 24th Ave., Melrose Park, Ill.

CONTROL REPAIR Service. Domestic controls reconditioned equal to new at a small cost. All work guaranteed for one year. Prices upon request. UNITED SPEEDOMETER REPAIR CO., INC., 342 West 70th Street, New York City.

#### PATENTS

HAVE YOUR patent work done by a specialist. I have had more than 25 years' experience in refrigeration engineering. Prompt searches and reports. Reasonable fees. H. R. VAN DEVENTER (ASRE), Patent Attorney, 342 Madison Avenue, New York City.

*Tested Approved*



## THE NEW ECON-O-COOLER

There are more than 3500 sales representatives who profitably sell the Koch line. Yet many attractive territories are still open to aggressive sales organizations. Write today for full particulars and prices.

## KOCH REFRIGERATORS

NORTH KANSAS CITY, MO.

A spacious new walk-in cooler that operates at a lower cost than was ever before thought possible. Every day a Koch Econ-O-Cooler will cut down overhead and expenses. It has greater capacity, longer life, and more efficient refrigeration.

The Econ-O-Cooler is only one of a number of standard Koch products. There are 108 standard models in the vast Koch line, including display cases, coolers, vegetable cases, and refrigerators for meats, bottled goods, flowers, bakery items, dairy products, etc. There is a Koch product to fill every need.

**BALANCED-ACTION**



*for Easier Operation*

Balanced-Action equalizes pressures on both sides of the valve seat at the instant of opening. Equalization takes place through a balancing channel located in the valve stem. This exclusive Henry feature assures that the valve will always open positively and close easily.

**HENRY VALVE COMPANY**  
1001-19 N. PAULDING AVE., CHICAGO, ILL.  
AND SOLD BY LEADING JOBBERS

**HUMI-TEMP UNITS**



Thousands of satisfied users insure you that Larkin Humi-Temps are correctly designed and accurately rated. See your jobber or write direct to

**LARKIN COILS, INC.**  
519 Memorial Dr., S.E., Atlanta, Ga.

*Originators of The Cross Fin Coil*

## Fan Blades and Blower Wheels

by **TORRINGTON**



THE TORRINGTON MANUFACTURING CO. of TORRINGTON, CONNECTICUT

ME PROUD FATHER—START WITH ONE PAPOOSE IN 1933—NOW HAVE 200 OF 'UM!



Chieftain started with one single cylinder compressor in 1933. Today we supply over 200 models of condensing units.

**TECUMSEH PRODUCTS CO.**  
TECUMSEH, MICH.

## BIGGER PROFITS WITH THE COMPLETE TYLER LINE . . .

★ With more money in circulation, stores, restaurants, hotels, bars, taverns—all need new equipment to get their share of EXTRA BUSINESS. The complete Tyler line meets every need—offers extra value, extra savings. Write TYLER FUTURE CORPORATION, DEPT. R-2, NILES, MICHIGAN

**TYLER DEALERS ARE MAKING MONEY!**



\* TYLER WELDED STEEL REFRIGERATED DISPLAY CASES, REACH-IN BOXES, SECTIONAL STEEL CLAD WALK-IN COOLERS, DRYERS, HOLD BEVERAGE COOLERS, BEER DISPENSERS



## Eastern Michigan Jobber Holds 'Open House'



Left: Jack Cowan, Automatic Products Co., J. A. De Puy, Minneapolis-Honeywell, and Ray Fischer of J. George Fischer & Sons, Saginaw refrigeration supply jobber, at the

"open house" staged at the firm's headquarters last week.

Right: Bill Culver, manager of the Fischer refrigeration department, stops during a busy afternoon to

write up an order for Mr. and Mrs. Vic V. Niles of West Branch, Mich., where Vic handles the General Electric commercial refrigeration line.



Left: J. A. De Puy shows a M-H control to H. C. Davis, Thayer Dairy Co., Clare, Mich., and to Sam White and Ray Mosley, both installation men for P. E. Daubensbeck of Pontiac, Mich.

Center: G. Pollock of Detroit Lubricator and Harold Schrage, service engineer of Pontiac, Mich. swap stories about service problems during the social hour between afternoon and evening sessions.

Right: Ray Fischer awards an A-P Trapit as one of the many door prizes furnished by manufacturers who exhibited at the "open house." R. Burrows of the Fischer company is at right.



Left: C. H. Morgan, Appliance Service Co., Flint, Mich., wins the soldering contest before part of the crowd of some 150 refrigeration men attend-

ing the sessions. J. R. Wylie of Howell, Mich. took second place.

Right: G. W. Joseph, Arctic Refrigeration Co., Lansing, Mich., examines

the Mueller joints made with Prest-O-Lite gas after the soldering contest was over. Mrs. Joseph is in the foreground.

### 150 Refrigeration Men At All-Day Show

SAGINAW, Mich.—Reflecting the rising interest in all types of commercial refrigeration, some 150 refrigeration men attended the "open house" held by J. George Fischer & Sons, refrigeration supply jobber here. The all-day session was devoted to discussions of new products, swapping stories about refrigeration problems, and watching a soldering contest.

Hosts at the meeting were Ray Fischer, George Fischer, W. J. Culver, and R. Burrows. Winners of door prizes were: C. G. McFarlane, J. R. Wylie Sales, Howell; V. V. Niles, West Branch; G. E. Osborn of Schultz Bros., State Rd., Saginaw; Nate Palmer of Wylie Sales, Howell; C. H. Morgan, Flint; Erwin Morin, Bay City; E. W. Yarmuth, Saginaw Hardware Co., Saginaw; G. T. Barrett, Kessel & Rummel, Saginaw; Ray Humman, George Dent Co., Bay City; and Roy Ludlow, Alpena.

Ray Fischer reports that success of the meeting indicates that the "open house" will be made an annual event.

### Household Exports Up In December

WASHINGTON, D. C.—Exports of household electric refrigerators during December, 1940 increased both in number of units and dollar volume over those of the corresponding month of 1939, according to statistics compiled by the Bureau of Foreign & Domestic Commerce. Shipments totaled 6,719 units valued at \$560,594 last December, compared to 6,421 units valued at \$536,407 in December, 1939.

Despite the gain over comparative 1939 figures, however, December household exports were down 16.7% from the average monthly shipments for the year, and dropped 20.4% from the November total volume of \$704,010.

Exports of commercial refrigerators, refrigerator parts, and unit air conditioners and parts during December were down from those of the same month of 1939, as well as from November volume totals. Commercial shipments in December totaled 715 units valued at \$77,808, against 758 units valued at \$96,766 in the same month of 1939. Shipments represent a drop of 31% from the average monthly total, and 37.4% from the November total of \$124,261.

Sales of refrigerator parts to foreign buyers amounted to \$323,680, a decrease of 26.8% from the preceding month's total of \$441,852, and an even larger drop from the December, 1939 total of \$486,296. Exports of air conditioners and parts fell to \$63,215 last December, as compared with \$67,112 in the same month of 1939.

Leading purchasers of household refrigerators during December were Brazil, with 1,682 units valued at \$138,628; South Africa, with 1,110 units valued at \$95,420; and Canada, with 583 units valued at \$39,313.

South Africa led commercial refrigerator purchasers with 70 units valued at \$10,019; Argentina was second with 111 units valued at \$8,457; and Brazil third with 169

units valued at \$7,985.

In the refrigerator parts classification, Canada led with imports of \$184,628; Argentina was second with \$33,165; and South Africa third with \$16,086. Panama Canal Zone topped buyers of air conditioners and parts with \$31,823, with Brazil second with \$4,933, and British India close behind with \$4,926. Also high in this classification was British Malaya with \$4,337.

### Unions Oppose Bill To Ban Sales By Utilities

(Concluded from Page 1, Column 1) a ban would injure the public, manufacturers, and retailers, since appliance sales now help to reduce power and gas rates and stabilize prices. He questioned the constitutionality of the proposed law.

Other opponents included George C. Becker, Worcester contractor; Joseph L. Walsh of the Brotherhood of Edison Workers; James J. Reagan of the Electrical Workers Union (AFL); Arthur G. Sias of the Municipal Lighting Association of Massachusetts; and spokesmen for various labor unions and equipment manufacturers.

### Ernie Tramposh New Head Of Midwest Jobbers

DES MOINES, Iowa—New officers of the Midwest Refrigeration Supply Jobbers Association are: president, Ernie Tramposh of Refrigeration Equipment Co., Kansas City, Mo.; vice president, E. L. Bengston, Republic Electric Co., Davenport, Iowa; secretary-treasurer, Jesse Boyd, Dennis Refrigeration Co., Des Moines.

### York Plants Guarded


YORK, Pa.—York Ice Machinery Corp. officials are perfecting plans to police the Roosevelt Ave. and Grantley plants in accordance with F.B.I. recommendations. Uniformed guards will be employed.

### Kelvinator Stages Show In Texas Branch


DALLAS, Tex. — A "Miniature All Industry Show" staged by Kelvinator at its branch offices and warehouse here, recently attracted

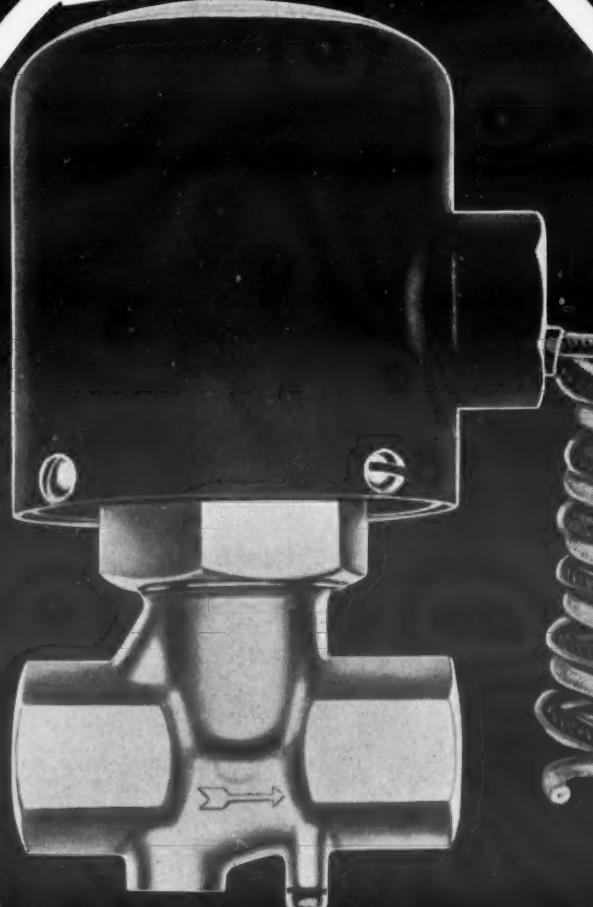
nearly 100 refrigeration and air conditioning dealers, contractors, and service men.

Members of the sales and service staff of the branch served as hosts, and conducted illustrated discussions of Kelvinator refrigeration and air conditioning products.



# DEPENDABLE

More than 1/3  
of the  Payroll is  
Devoted to  
**TESTING**



A-P Model 73-RJ Solenoid  
Refrigerant Valve

★ Progressive Service Engineers use and recommend — and Aggressive Jobbers stock and talk —  Products.


### AUTOMATIC PRODUCTS COMPANY

2450 NORTH THIRTY-SECOND STREET  
MILWAUKEE WISCONSIN

Export Department 100 Varick Street, New York City

### Anaconda Copper Refrigeration Tubes

Unusually long lengths!



THE AMERICAN BRASS CO.  
FRENCH SMALL TUBE BRANCH  
General Offices—Waterbury, Conn.